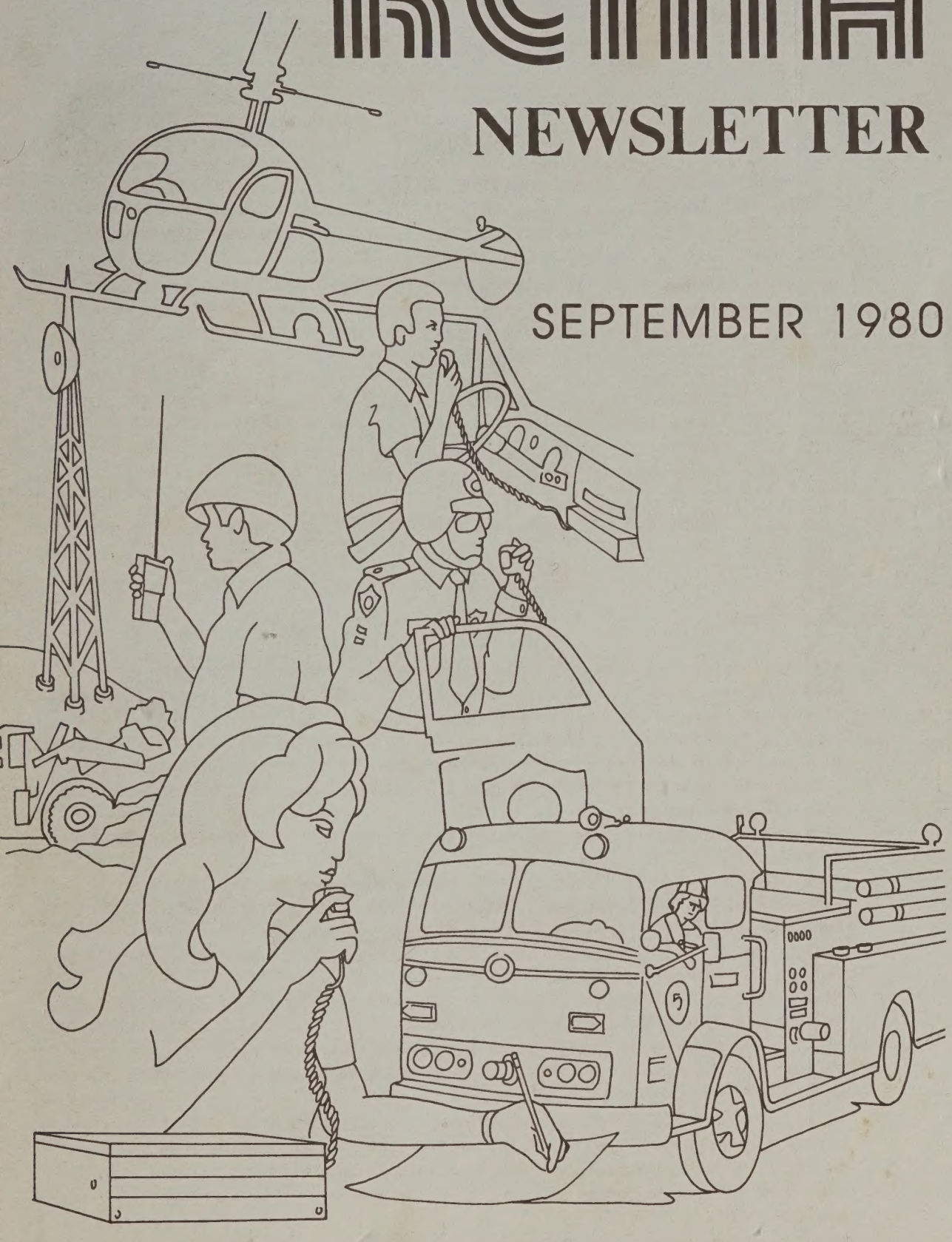
RCMA

NEWSLETTER

SEPTEMBER 1980



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OF MONITOR RADIO LISTENERS

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FOR YOUR INFORMATION:

1. All club business, unless otherwise noted, must be addressed to: RCMA, P.O. Box 4563, Anaheim, CA 92803. This includes matters that relate to renewals, changes of address, newsletter delivery problems, etc.
2. Input to the RCMA Newsletter must be mailed to the proper editors whose addresses are included in the individual column headings. If no particular column seems appropriate, send it to RCMA, P.O. Box 216, Willow Grove, PA 19090 and mark the envelope "For Newsletter."
3. RCMA Newsletter back issues (reprints) are not presently being offered for sale to members.
4. To forward a letter to a specific RCMA member whose address you do not know, put your message to that person in a stamped envelope with your return address in the envelope and mail to: RCMA, P.O. Box 408, Earp, CA 92242.
5. Please include your RCMA membership number with all correspondence to newsletter editors or club headquarters.
6. If you require a reply when writing to RCMA headquarters or one of the editors, you MUST enclose a self-addressed, stamped envelope.
7. Please only write on one side of the paper.
8. Please don't combine in one letter several items that should go to different addresses.
9. If you are inclined to type what you submit to the newsletter, please don't exceed a seven-inch column width and please single space. Doing this may save an editor from having to retype the material. Please don't use script type.
10. Your RCMA membership number and expiration date appear on your newsletter mailing label.
11. You may join or renew your membership for ONLY one year at a time.
12. The RCMA Newsletter accepts paid advertising. If you would like to place a paid ad, please write to our advertising manager (address above) for our advertising guidelines.

RCMA NEWSLETTER
SEPTEMBER 1980 ISSUE 55
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RCMA, P.O. Box 4563, Anaheim, CA 93803

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The RCMA Newsletter is published monthly by members of the RADIO COMMUNICATIONS MONITORING ASSOCIATION, P.O. Box 4563, Anaheim, CA 92803. Subscription rate/membership fee is $10.50 per year for U.S. residents and $12.85 (payable in U.S. funds) for persons in all other countries (dues subject to change). Information contained herein primarily is obtained from members and does not necessarily present the position or reflect the opinion of RCMA as a whole. The RCMA Newsletter editors and officers are not responsible for the accuracy or validity of information contained herein. RCMA does not necessarily recommend or endorse products or services advertised herein. This publication is copyrighted ©. Reproduction of any material in this newsletter is prohibited without prior written permission.

** Calendar **

Send notices of upcoming events for the Calendar section to John Clark, RCMA, P.O. Box 4563, Anaheim, CA 92803. Please send notices well in advance of the Newsletter deadline.

August 16-17 Weekend MOUNTAIN TOPPING tour with Karl CAOR022 and Danny CAOR004 Every one knows the higher the antenna the better the reception. This is the opportunity to go for some line of sight DXing with two experts.

September 2 TUESDAY Board meeting and newsletter labeling at Anaheim Library Branch 1349 S. Euclid. Board meeting 6:PM Labeling 7:PM. This is an opportunity to have your voice heard, assist the club, and catch up on the latest scanner activity. All members are welcome. Any DX members in the area on vacation. Here is a good spot to break the trip. We can use all the help we can get.

September 8 MONDAY Newsletter deadline for "October" Newsletter.

Sepetmber 19 FRIDAY General meeting at Mercury Savings and Loan, Valley View and Lincoln Ave, Buena Park, Ca. This is to be one of our Sharing Sessions. Everyone is encouraged to bring something to share with the others.

September 30 TUESDAY Board Meeting and Newsletter labeling at Anaheim Library Branch 1349 S. Euclid.

October 6 MONDAY Newsletter deadline for "November" Newsletter.

October 17 FRIDAY General Meeting and a tour of KOCE Channel 50 TV satellite facility. Golden West College campus, Huntington Beach California.

November 4 TUESDAY Board Meeting and Newsletter labeling at Anaheim Library Branch 1349 S. Euclid.

November 10 MONDAY Newsletter deadline for "December" Newsletter.

November 21 FRIDAY General Meeting. Gordon West CAOR017 noted west coast editor and Larry Guy of the FCC tentatively scheduled.

December 2 TUESDAY Board Meeting and Newsletter labeling at Anaheim Library Branch 1349 S. Euclid.

December 8 MONDAY Newsletter deadline for "Janurary" Newsletter.

Janurary 6 TUESDAY Board Meeting and Newsletter labeling at Anaheim Library Branch 1349 S. Euclid.

Janurary 5 MONDAY Newsletter deadline for the "February" newsletter.

Janurary 16 FRIDAY General Meeting agenda open at this date.

February 9 MONDAY Newsletter deadline for the "March" newsletter.

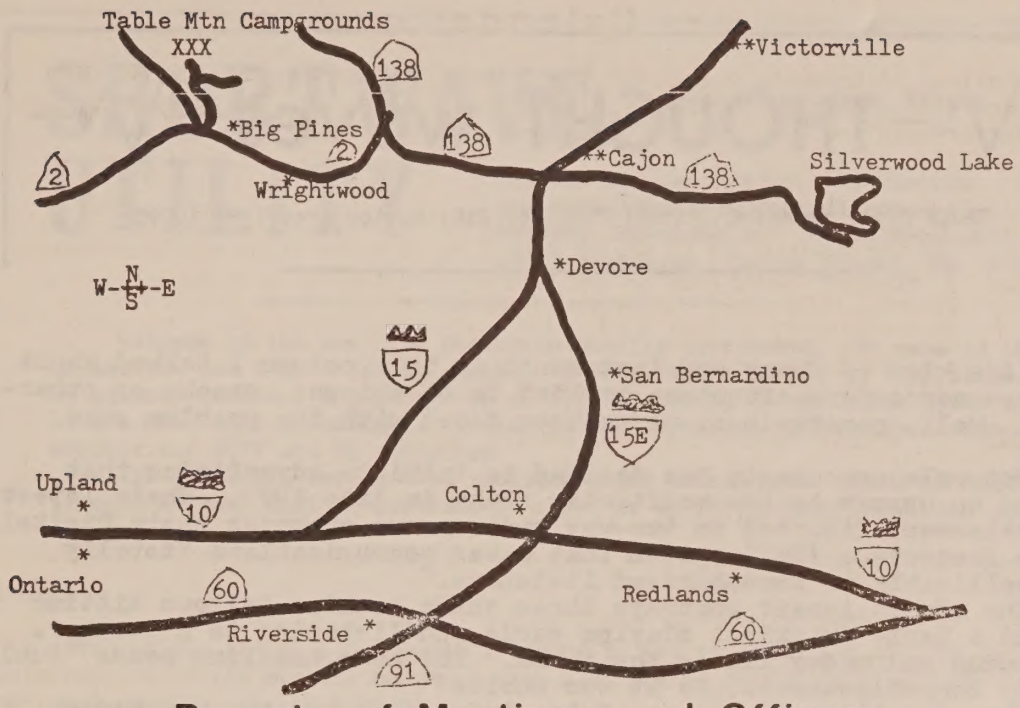
The fourth Annual RCMA Picnic (and Monitoring Spectacular) will be held this year at Table Mountain in the Angeles National Forest. There is plenty of room for all and lots of parking space.

Time: 8:00 AM (0800 hrs) Date: Saturday & Sunday, August 19 & 20, 1980

From Los Angeles and vicinity, take the Angeles Crest Highway, State Route 2 (SR2) all the way through the forest to the Big Pines Ranger Station. From Orange and Riverside Counties, and all points south, take Interstate 15E (I15E) to State Route 138 (SR138) turnoff toward Palmdale. Follow SR138 to Angeles Crest Highway, State Route 2 (SR2), and turn towards Wrightwood. Continue through Wrightwood to the Big Pines Ranger station. At the Ranger Station, someone will guide you into the picnic site or we will have a map posted to show which campground site we will be at.

For fire buffs, Wrightwood has a new fire station with 9 pieces of equipment, and Big Pines Station of the USFS has 4.

For side field trips, we may go to the Table Mountain "E" site, and to Blue Ridge "E" site.



Reports of Meetings and Officers

Send reports (informal accounts) of RCMA meetings, gatherings, etc. which have occured to: John Clark, RCMA, P.O. Box 4563, Anaheim, CA 92803.

The first meeting of the Chicago-Midwest chapter of RCMA was held June 21st at Nancini's in Berkeley Illinois. Some 23 members family and guests enjoyed a round table discussion as well as informal exchanges with their fellow radio hobbyists.
On Sept 27, 1980 another meeting will take place at Nancini's Restaurant, 5555 St. Charles Rd. just 2 blocks east of the I-294 exit ramp at St. Charles Rd. Be there at 1 PM.
Future plans call for a meeting in mid-November. The Chicago Police Department holds an annual open house during Law Enforement Week in late October or November. We plan to visit as a group and take the grand tour which includes the crime labs and communications centers. For more info, send SASE to Ed Sirovy, 311 s. Williams St., Westmont Il 60559. Of course you can just show up at the meeting. It is open to any RCMA member regardless of residence, their family and invited guests. I hope to see many of you there.

Edward Robert Sirovy IL-4
311 S. Williams St.
Westmont Il. 60559

FROM MICHAEL (IL-014):

I attended the first official meeting of the Chicago area members on June 21, 1980, and I would like to express my appreciation for the efforts of the organizers: Ed Sirovy (IL-004) and Joe Vinci (IL-059). Ed personally contacted over 100 members and paid for all the postage. Joe found a private dining room in a resturant located west of Chicago with access to all major expressways.

I urge all members to support future meetings and to supply our Public Safety editor, John Arendt(IL-012) with information from your area. RCMA is only as good as WE make it. PARTICIPATE! Let's see some new faces at our next meeting on September 27, 1980.

THOUGHT waves

Chuck Gysi, Managing Editor, P.O. Box 216, Willow Grove, PA 19090

It's kind of funny how last month in this column I talked about how scanner owners often are implied to be thieves, crooks or otherwise. Well, nonetheless, we've been faced with the problem once more.

Motorola once again has decided to initiate advertising that caused an uproar in the monitoring ranks in late 1978. Their latest advertisement directed to two-way radio users promotes their Digital Voice Protection (DVP) system that makes communications "totally unintelligible to unauthorized listeners."

The advertisement portrays three shady looking fellows sitting around a table drinking, playing cards and listening to a scanner. A handgun and money lie on the table. The ad's headline reads "Public safety communications...is it too public?"

The advertisement gives a false impression to two-way radio users that all monitor enthusiasts are criminals only interested in knowing when the cops are on their tail. The ad campaign paints a false impression of those who monitor for a hobby.

There have been countless times when someone listening to their scanner has picked up an all-points bulletin for an alleged criminal and spotted him or her walking down the street and helped police authorities nab the suspect. But that's not the only reason. Those listeners are aware individuals who know what is going on in town. And many of us just like to listen; it is our hobby.

But if Motorola keeps their ad campaign going, all monitor enthusiasts will have a problem. Our right to use scanners may be limited by local officials and lawmakers.

Motorola's campaign for DVP caused quite a stir back in late 1978. Through the efforts of letters written by many RCMA members and monitor hobbysists, the ad campaign was wisely withdrawn. With your support, we can demand that Motorola once again withdraw this type of advertising. You may address your letter to:

Mr. William J. Weisz
Vice Chairman
Motorola, Inc.
1303 E. Algonquin Road
Schaumburg, IL 60196

Next month we will have a special report for you on the Association of North American Radio Clubs' (ANARC) convention held at the University of California-Irvine. International broadcasters and radio hobbyists from all over attended the ANARC '80 convention on July 18, 19 and 20.

What's on your mind? Are you mad about something relating to monitoring? Would you like to share some thoughts with other club members? Hopefully next month, we will beginning a "letters to the editor" section to the RCMA Newsletter. For several years, the newsletter primarily consisted of letters from members and we would like to include your thoughts as well. If you feel inclined to let loose your thoughts, drop a line to the Willow Grove address.

SHORTWAVE UTILITY

Chris Devendorf, Editor

Send reception reports, information and questions regarding shortwave utility listening to: Chris Devendorf 29261 Buckhaven, Laguna Niguel, CA 92677.

Welcome to the new RCMA Shortwave Utility Department. My name is Chris Devendorf, and I will be the editor. I have been a member of RCMA since 1975. My primary receiver for shortwave utility listening is the McKay-Dymek DR-33C with a KRS "active" antenna. I also use an Info-Tech M200E with a video monitor for RTTY and CW reception.

The following letter from retiring chief editor Iden Rogers to his successor Chuck Gysi is provided to serve as an introduction for this new column.

Chuck,

The subject of Chris Devendorf's letter to you and the fact that he is volunteering really excites me and I take pleasure in answering your request for my personal thoughts on the subject.

I feel that the RCMA Newsletter should very definitely begin to include reception reports and articles pertaining to many types of transmissions in the shortwave bands. As I see it, we have everything to gain and nothing to lose --- as long as our VHF/UHF coverage is not compromised or degraded in any way. The new shortwave coverage should be considered as an addition to what we already have rather than a dilution of it. It should make our publication considerably more attractive to both prospective and renewing members. There will always be those who will protest but it seems to me that RCMA's present coverage (VHF/UHF Utility) puts it in a very natural position to also include HF Utility and actually even more so than the shortwave clubs that deal predominately with international broadcasting but with a Utility column stuck in. RCMA can attract many HF Utility listeners by making HF Utility one of the highlights of our coverage rather than a sideline as many other clubs do. But, we must offer more space and allow members to get into greater detail than is permitted in other ANARC club publications due to their limited space. We are, after all, an "all Utility club". Utility coverage is not a sideline for us --- RCMA IS ALL UTILITY.

I genuinely believe that amongst our ranks we have the expertise, the leadership and available pages in our publication to provide the best shortwave Utility coverage of all the ANARC clubs. As you can see, I am nothing but optimistic. In terms of the present needs, interest and desires of shortwave Utility listeners and DXers and considering the extent of coverage (or lack of it) in other club publications, we are in a good position to be very successful at this undertaking.

The inclusion of shortwave Utilities in the Newsletter may introduce many previously unexposed VHF/UHF monitor listeners to the exciting world of shortwave Utilities. Similarly, as our Utility coverage grows and becomes recognized, we will start drawing veteran Utility listeners and DXers who may then be introduced for the first time to the absorbing and different world of monitor radio listening. Everyone wins with RCMA!

Chris, in my opinion, is the best informed and most active shortwave Utility listener I have had the pleasure of knowing. His alert mind, curiosity and devotion to detail sets him apart from most others. RCMA is fortunate!

It appears that Chris is willing to take on the entire shortwave Utility column or section. This is quite an undertaking. It might be wise to develop a plan which will eventually divide up the various categories of utilities into separate columns,

each with its own column editor --- one who specializes in a particular area of listening. I say this because the eventual workload involved to properly handle all the various Utility categories after this catches on will be excessive for one person.

Chris could still oversee all the Utility column editors and in turn be responsible to you. This in effect would make him an assistant editor to you if he ran the whole Utility show including column editor recruitment and selection and keeping them all on course. This may not be what you and Chris have in mind but I feel it is a practical division of responsibility to be considered. At any rate, a clearly defined plan and set of goals should be developed and immediate steps be taken toward the attainment of these goals. Knowing Chris, I rather expect that this is already taking place.

Most RCMA members in their monitoring hobby are "listeners", that is, they listen to message content of transmissions rather than placing emphasis on the distance over which the transmissions travel. The latter is called DXing and our "Low Band Skip" column is the only place where DXing presently receives attention in the Newsletter. I believe the shortwave coverage in the RCMA Newsletter should cater to the interests of both the "listener"and "DXer". Both will want to use the Newsletter as a medium of information and data exchange. The listener as well as sending in loggings will want to offer and exchange theories on various nets, channel designators, tactical call signs, relationships between HF, VHF & UHF channels for given users, tracking aircraft as they go from one point to another, etc, etc. The DXer will focus on and report information about distant or difficult stations to receive. The DXer's goal will very possibly be to increase his total country count or logging count within a particular service --- a type of collecting. One of the rewards for the DXer is to be able to publish loggings of difficult or distant stations received. We must meet the needs of both the listener and the DXer.

If RCMA now intends to cover Utility frequencies below 30 MHz, we must ask how far down do we go. I propose that we go down to 415 KHz for what I feel is a rather legitimate reason. Maritime/coastal station CW traffic occurs in several places in the 2-30 MHz range. In addition to these, there is a very active band with similar traffic below the medium wave broadcast band (regular AM broadcast), the bottom end of which is 415 KHz. To allow full coverage of maritime CW traffic in the RCMA Newsletter the inclusion of this band is a must. It is true that Utilities exist well below 415 KHz but I feel for two reasons that we should stop at that frequency: 1) the "ballgame" changes considerably on frequencies below this due to the requirement for different receivers, antennas and techniques and 2) the Long Wave Club of America, a fellow full member ANARC club, is doing a terrific job in the longwave range.

I like the defination some use for Utility --- "Radio transmissions not intended for public audiences." I believe the Utility coverage in the RCMA Newsletter should include everything except amateur radio, CB, point to point international broadcast feeders and certain sensitive frequencies.

The RCMA Newsletter has met with great success using the multiple editor-multiple column system for its VHF/UHF coverage. I believe, as stated earlier, that the HF coverage should similarly be divided up into specialty columns each with its own editor. As soon as it is agreed upon which new HF columns will exist, the column heading artwork should immediately be started and editors sought. Here is a list of the columns I propose:

RTTY --- all services

Since the reception of radio teletype requires special accessory equipment this automatically lumps RTTY listeners into a special interest group even though there are various services using the RTTY mode of transmission which in the voice mode may be covered in other columns. What I'm saying is that it makes more sense to put all RTTY loggings in one column rather than separating them into their various services and putting them in separate columns along with voice transmissions. An RTTY column editor, experienced and active in RTTY, would be in the best position to understand and evaluate member input. The RTTY listener would appreciate having all RTTY listings in one place.

CW --- all services

The same argument that applies to RTTY applies to CW except that no special accessory equipment is required if one can copy Morse code. (Nowadays one does not need to be able to copy Morse code to enjoy it. With a little bit of "folding green" one can have CW printed out on a CRT and/or a printer. In fact, many converters, like the Info-Tech, will decode both RTTY and Morse.) Since Morse code reception and loggings will appeal to a select group, they should all appear in a separate column regardless of service. For the person who has expanded his listening interests to include CW reception, there are many interesting things to listen to. We must have a place for all of them, even things like HF CW beacons. HF beacons, for example, can be intriguing because they are very difficult to locate and identify. If RCMA Newsletter pages were open to HF beacon chasers, they could coordinate info in tracking down locations by comparing bearings, best times of reception, signal strength, etc. Similar things could be done with spy/numbers stations whether CW or voice.

MILITARY --- U.S. and Foreign (voice)

COAST GUARD (voice)

GOVERNMENT --- U.S. and Foreign (voice)

The above three could be treated separately in three columns with three editors or combined. This would depend on the extent of member participation and on the editor's available time.

HF ONE WAY VOICE

One way voice transmissions, such as time/frequency transmissions, weather, voice markers, spy/numbers, etc, could all be handled by an "HF ONE WAY VOICE" column editor.

By including time/frequency in the list it is not my intent to encourage listeners to make a habit of reporting things like WWV on 15 MHz but instead some of the more obscure and often part time foreign time stations. Some of these are very legitimate and difficult DX catches and loggings of such receptions deserve to be printed.

Broadcast feeders, though utility by definition, really are much more closely related to international broadcast since the program content is intended for public audiences when retransmitted. These, I believe, should be omitted from our publication.

HF CIVILIAN AERONAUTICAL (voice)

There are many interesting SSB commercial transoceanic communications that can be received which truly compliment VHF aircraft listening. Coverage of ARINC and company frequencies certainly has a place in our Newsletter.

QSL

Some Utility DXers are quite interested in obtaining QSL cards to verify reception of certain Utility stations. This often difficult pursuit is almost a separate hobby in itself somewhat akin to stamp collecting. It is something in which I personally have no interest but I recognize that many do it avidly and enjoy it thoroughly. There is no better place for coverage of this activity than in a hobby radio publication. So, I propose that we also include a shortwave Utility QSL column.

FAX

As with our VHF/UHF satellite coverage, RCMA should be the first club on the block to have a column devoted to facsimile reception. It would take a dedicated editor because there would be little member input.

ITU TOPICS

Such a column could be the HF counterpart to our existing "FCC Topics" column.

As time goes on and things begin to develop, we should also give thought to having available space for propagation forecasts, lists of books and references related to HF equipment/accessories/Utility listening.

The above suggested columns and any other items relating to coverage below 30 MHz could be kept in a completely separate section of the Newsletter and I tend to favor this approach. On the other hand, in some cases it could be advantageous to integrate HF coverage into some existing columns. The Aircraft column, for example, would seem to be a natural place for HF civilian aeronautical coverage. The Federal Gov't/Military column is another possibility for such integration. The Technical Topics column could consist of an HF section and a VHF/UHF section, each with its own editor but under a single Technical Topics column heading. The Beginners Corner column could begin to include both VHF/UHF material and HF material.

If the "keep the HF separate from VHF/UHF" approach is used then a VHF/UHF Technical Topics and an HF Technical Topics column could exist each in its own section of the Newsletter, etc, etc. There are many options open and I see it as a very exciting and important time for RCMA.

Whether we tend to integrate HF or keep it mostly separate, I do believe that the Marketplace and Contact/Info Wanted columns should soon open their doors to shortwave.

I am optimistic and enthused about the new shortwave coverage and feel that there should be a "full steam ahead -- it's here to stay" approach rather than presenting it on a "trial" basis or "let's try it and see". The "market" is there! We just need an aggressive team to go after it. Once RCMA becomes recognized as an all Utility club devoted to almost all phases of HF Utility (in addition to our existing VHF/UHF Utility coverage) it will start to draw scores of persons who are members of other shortwave clubs. I, for example, joined SPEEDX and ASWLC some time ago just to have access to the HF Utility sections of their publications. To me, the international broadcast coverage was of minimal interest. Among Utility listeners I don't feel that I am alone. Once they learn that we are serious, have numerous editors each devoted to a special aspect of Utility listening and are in a position to offer more space than the other clubs to HF Utility coverage, we will without any problem be NUMBER ONE! It is likely that some Utility editors of other clubs would be inclined to shift their allegiance to RCMA. After all, a Utility nut's dream is a responsive ALL UTILITY CLUB! We have more than proven ourselves in VHF/UHF Utility --- we can do it with HF Utility too! It is time to move upward and onward but let us not be timid or reserved --- let's go after it!

I feel that immediate consideration should be given to redrafting the RCMA goals, advertising guidelines and club information sheets to reflect the change so that they will be ready to go when needed. I am willing to help.

My philosophy with the Newsletter has been to go all out once a commitment has been made. With a totally positive and aggressive attitude, success is more of a certainty.

The comments and opinions contained herein are offered to you at your request. I am not intending to direct or control or interfere with the course that the club officials and editors care to take regarding the expanded Newsletter coverage but I cannot help but say what I feel on the subject and especially when invited to do so.

Iden

I only have two basic changes to what Iden wrote about. First, I feel broadcast feeders should be included due to the fact that they are "utilities", and are much like the remote broadcast pickups found above 30 Mhz. Second, I don't feel we should put a bottom limit of 415 khz on the club. By not doing so, this would make the RCMA a "Full Spectrum" radio club covering frequencies from zero to infinity. Clubs like the Longwave Club of America would still exist for members who specialize in the low frequencies.

Since a large amount of material for this column will be member reception reports, a reporting form has been included in the center of this newsletter.

Use this form as a master copy, and make yourself some photocopies as required. Please type or neatly print your reports on one side of this form only and forward them to me. Please use the following guidelines when making reception reports:

Freq — Please list all frequencies in kilohertz. For SSB transmissions, use the "suppressed carrier" frequency. For all other modes, use the "assigned" frequency. For estimated frequencies, please indicate the frequency with "a" to show an approximation. (6760a).

Mode — List the mode as appropriate. (USB / LSB / AM / CW / MCW). With RTTY transmissions, list also the Speed/Shift, and use the letter "R" to indicate the reversed mode.

Date & Time — List all dates and times in GMT.

Callsign — List the international callsign only when it was used by the station monitored. If no internation callsign was used, indicated the voice or tactical ID used. With all callsigns including the number zero, please use a cancelled zero to avoid confusion with the letter O. (Example, ABNORMAL 1Ø, or KKN5Ø).

Agency — In this space list the organization that operates the station if known. Commonly used abbreviations like, USAF, ARINC, are acceptable. If the operator is unknown, leave this space blank, or indicate the type of station. (Aeradio, Coastal, etc).

Location — Indicate the city and country of the transmitter location if known. If unknown, leave blank.

Remarks — This is for other pertinent information like, station called or worked, type of traffic, etc.

Name — Please list your full name and membership number.

Please do not send any Ham, CB or Broadcast loggings! As editor, I reserve the right to delete any reports that I deem unsuitable for the column.

To close this first edition of the Shortwave Utility Column, I would like to mention the following. Over the past few years, there has been a lot of talk about the shortwave bands being abandoned in favor of satellite communications. Recently, I read an article in Aviation Week and Space Technology (June 3, 1980) that contained the following paragraph:

"With the prospect that space could become a battleground, the Defense Dept. is showing renewed interest in high frequency (HF) radio, which was the primary military means of long-distance, tansoceanic communications before the advent of communications satellites.

One reason is that relatively small, low-power transceivers, using modest-size antennas, can achieve global communications under favorable propagation conditions."

Here's to hoping that HF communication, and this column are around for a long time.

International

Richard Stein, Editor

This column is for reporting two-way communications frequencies above 30 MHz, radio system details, monitoring experiences and any other information relating to monitoring in countries other than the United States and Canada.

Send to: Richard Stein, 456 Barrymore Pl., North Brunswick, NJ 08902.

I have received additional information about monitoring in Northern Ireland from a friend. He writes that he obtained a Bearcat scanner from the Radio Shack of London. The law allows this because the receiver contains Amateur frequencies on all bands and these are the only frequencies one can legally monitor in that country. The law is totally against any form of monitoring as all forms of radio are covered by the Official Secrets Act. (this has been the problem with CB radio.) You can be jailed if you are caught, but you must be caught monitoring and transmitting at the same time. Having the set itself is not an offense. If that were so, then the law would be jailing most of the country. The reason? Well, most of their VHF FM sets cover the entire band of frequencies- that is from 38 to 108 MHz- even though FM is only allocated to 88.7 to 100MHz in Region One. Most of the sets are of foreign manufacture, usually Japanese, thus the inclusion of the full FM band as we know it. Most of the Fire, Police and ambulance repeaters do transmit in this range and it is a bit difficult to avoid receiving these stations.

The radio systems in this part of the world are quite extensive. UHF is used in the Cities and Towns, VHF in the Country area, and low band is used forlong range and some links to other transmitters.

There is an on-going battle between illegal CB and the Home Office (like our FCC) and things have been getting very hot of late. The result of all this is that any car with an aerial like a CB-unit is always stopped and searched. Any set found is of course confiscated by Police, Post Office or Customs. One wonders what they would say about a synthesized, programmable scanner.

ISRAEL

We've had the privilege of spending two vacations in Israel. Because of the very delicate situation in the Mid-East, I hesitate to print any information from that area of the world. I think that the following, however, is no longer of a sensitive nature and may be of interest.

The Israeli Ministry of Communications provides a service to the nation's telephone system called the "Talking Clock". This is a time service accessed by telephone using one asimon (אסימון-token). These asimonim (plural), thicker than a quarter and slightly larger than a dime, are round, unmilled, with a hole in the center and the face of the Israeli phone dial on the obverse. They are available at all post offices and sell for 5 per Israeli pound (now about 3.5 cents) and sell for .....

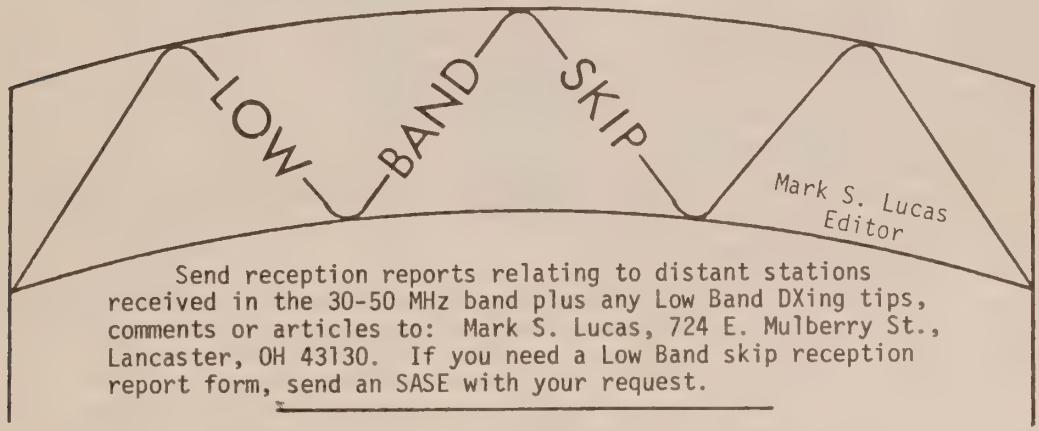
On our first trip in 1974, I heard these time signals being broadcast near 158 MHz. I only had a Lafayette 5-band portable with me and could only guess at the frequency. I wrote the Ministry requesting information. I did receive a reply after 3 months, and obviously after some checking on me.

The exact frequency of the only transmitter (located in the vicinity of Jerusalem) was 158.525 MHz with an ERP of 50 watts. I did not hear these transmissions in 1979, although the service is still available by phone. The letter also carried the exhortation that ITU Radio Regulations prohibited unauthorized reception of radio communications not intended for general use of the public.

An interesting side note- the letter contained a file number above my name and address. I had occasion to write the Ministry again last year concerning regulations dealing with satellite to home reception- and again the same file number appeared on the reply. Appears I'm on record at least in this ministry.

COMPLAINT DEPARTMENT

An RCMA member sent me a list of Republic of Mexico frequencies. I don't know the source of his list. The list was not extensive but it did include six frequency listings that I had reported in my article on Mexico in the September 1978 RCMA Newsletter. One of these frequencies was coded. It's very nice to see your information incorporated in someone's list. However, I strongly feel that the person who used these frequencies, or does so in the future with any frequency information published in the Newsletter, should at the very least, acknowledge the source- that is RCMA. Members devote time and contribute information for the benefit of the organization and membership at large. It is unfair to all concerned just to have this information picked out. A proper acknowledgement is the right way to go. Until next month שלום.



Send reception reports relating to distant stations received in the 30-50 MHz band plus any Low Band DXing tips, comments or articles to: Mark S. Lucas, 724 E. Mulberry St., Lancaster, OH 43130. If you need a Low Band skip reception report form, send an SASE with your request.

Welcome to another month, and our first this year of a Sporadic-E report. If you have heard any such skip, send it in--now! OK?! On we go.

FROM ANDY (GA-015):		33.98 MHz	KQA 530	NO ID		FIRE
BASE	BC-220	6-29-80	2200 EDT			
		33.98 MHz	KBP 950	NO ID		FIRE
BASE	BC-220	6-29-80	2210 EDT			
		33.98 MHz	KGE 470	NO ID		FIRE
BASE	BC-220	6-29-80	2212 EDT			
		33.74 MHz	KTR 382	NO ID		FIRE
BASE	BC-220	6-29-80	2230 EDT	New York Fire (?)		
		33.86 MHz	KBK 521	NO ID		FIRE
BASE	BC-220	6-29-80	2322 EDT	Richfield, Minn. (?)		
		33.90 MHz	NO CALL	NO ID		FIRE
BASE	BC-220	6-29-80	2330 EDT	Lancaster (State ?)		Reserve Fire
		33.86 MHz	KEE 873	NO ID		FIRE
BASE	BC-220	6-29-80	2214 EDT			
		39.90 MHz	NO CALL	NO ID	State Emerg.	
BASE	BC-220	6-29-80	2304 EDT	Nebraska (CD),Omaha		
		33.86 MHz	KGC 676	NO ID		FIRE
BASE	BC-220	6-29-80	2300 EDT			
		33.98 MHz	KWH 498	NO ID		FIRE
BASE	BC-220	6-29-80	2302 EDT			
		33.86 MHz	KCE 270	NO ID		FIRE
BASE	BC-220	6-29-80	2230 EDT			

"Also, 33.98 is used for Mutual Aid. I've heard so far "Harbor Creek C-1", "Mill Creek FD", "Base 901". They seem to have a large number of units, including Scuba Diving Team, and boat units. Any members who can help???"

"In responseto Larry (MICH-001) query about Spanish on 39.18 MHz (July issue),it is a National Park Security frequency from Caracas, Venezuela. Also, at times, a repeater from Mexico uses this channel. I believe the Mexican repeater is some type of PD frequency."

Finally from Andy, a question. "How are people supposed to make an exact "ID" of stations-they usually just give call letters. I have tried looking up the cities mentioned in atlases and maps. But they show at least 10 cities under the same name! The northern states are quite populated. So from exactly what city and state it comes from is impossible to guess."

Well, golly Andy, isn't one reason you bought your scanner was to get in on the "You-Are-There" type of adventure? And part of the adventure is to seek out VHF "skip" and to get a "fix" on its location. Now there are several legitimate solutions to your questions Some, I will admit, are less expensive and less troublesome than others.

1) Buy either a micro-computer, or terminal to hook in to a large main frame system, and enter ALL the possible city locations from several volumes of atlases. Then sort them to your needs. Well, that's all fine and good, IF you've got the money and technical expertise to go about such a lengthy venture!

2) OR...buy several volumes of maps and atlases and keep them by your scanner. Well, it'd be a bit expensive (the wife sez the kids need new shoes) and it can create an untidy eyesore by your shack (Wife sez mother-in-law coming for a visit and she can't have the place looking like a mess!)

3) Make a real wild guess as to city it MIGHT be and get the Information phone Operator to get you the number of that department. Then you make a nuisance of yourself and ask the dispatcher if it was them.

4) Buy ALL nine volumes of the "Police Call" directory. This was you can get the callsign and try to look up the frequency for a MATCH. But then, that agency may JUST let their license expire (getting the FCC's ire!) and it may not be listed in that year's "Police Call."

So, then, WHAT DO YOU DO? What I personally do is buy at least ONE GOOD U.S. (or North American) Atlas and if you've got funds left over buy all nine volumes of "Police Call." That investment may just pay itself in short order!

Oh, also, listen for street names and other town names of nearby communities. That's clue #1. Listen for dispatcher accents. If they say "Cah" instead of "car" then you've got the Boston area. If words that normally end with a "er" sound come out with a "ah" sound, then you've got the northeast "paht" of "Americer." And don't foget those "perty" Southan accents! That's clue #2. Next, listen for state, U.S. and Interstate highway numbers' (Even numbers are East/West, and Odd numbers are North/South.)

And OF COURSE we do rely on Y O U for giving us the answers to other members queries. That's what this column is all about! I didn't mean to give a lecture, but it's a question that's been brought forth many occasions.

FROM BOB (WA-007): "From your January column I looked up this information in my microfiche. It should fill in some of the blanks."

KYX 938	Lynch Fire Protection Dist., Danville, Ill.	33.70 MHz
KKS 809	City of Lenner, LA.	33.70 MHz

FROM DAN (PA-014): 35.28 MHz NO CALL NO ID SERVICE BASE BC-300 6-14-80 1750 EDT Spanish language

(Editor's Note: Dan stated that a tone was transmitted before verbal message. He thinks it could be a fire frequency. Well not knowing WHERE,I cam't make an educated guess. It COULD be fire, but more likely it COULD be a pager. It sits right in the middle of the mobile phone and pager band so it could be. Anybody out there wanna hazard a guess?)

Guess that'll wrap up another month for me. Before I unplug this typewritter for another time, again I hate being like your wife, but we need YOUR loggings! We don't collect Welfare or get any Federal grants to support us, so it ends up you being sole supporter. But what could be a nicer way of showing you enjoy the fine articles contained in this and other RCMA columns than to CONTRIBUTE NOW! I'd better quit now. I sound like a politician!

Price	Brand and model	Coverage	Remarks (Prices/models subject to change)
	MOBILE ANTENNAS		
24.95	Hy-Gain MR20	Low	No-hole trunk mount
41.50	Antenna Specialists ASPB555	Low (42-50)	*Magnetic
37.25	Antenna Specialists ASPB447	Low (42-50)	*Hole mount
14.50	Antenna Specialists MONR1	High(Can cut UHF)	Hole mount
21.75	Antenna Specialists MON2	"	No-hole trunk mount
23.95	Antenna Specialists MON9	"	Magnetic
17.75	Antenna Specialists MON30	"	Gutter mount
16.95	Newtronics THF	"	*No-hole trunk mount
13.95	Newtronics UHT1	"	Hole mount, no connector
19.95	Hy-Gain MR1	High	Hole mount
24.50	Antenna Specialists ASP692	High(Can cut UHF)	*No-hole trunk mount
	Antenna Specialists MONR1, MONR2, MON9, MON30	UHF	(See same models above)
	Newtronics THF, UHT1	UHF	(See same models above)
42.50	Antenna Specialists ASP662	UHF	*No-hole trunk mount 5DB gain
37.25	Antenna Specialists ASP660	UHF	*Hole mount 5 DB gain
47.25	Antenna Specialists ASP664	UHF	*Magnetic 5 DB gain
26.95	Shakespeare 472	Low & High	*Hole mount, fiberglass
23.95	Antenna Specialists MONR12	Low & High	Gutter mount
30.25	Antenna Specialists MONR32	Low, High, UHF	No-hole trunk mount
28.75	Antenna Specialists MONR33	Low, High, UHF	Hole mount
33.25	Antenna Specialists MONR51	Low, High, UHF	Magnetic
33.95	Avanti 808	Low, High, UHF	Trunk mount
33.95	Avanti 804M	Low, High, UHF	Magnetic
33.95	Newtronics MOM	Low, High, UHF	Magnetic
29.95	Hy-Gain MR16	Low, High, UHF	No-hole trunk mount
24.95	Newtronics MOT	Low, High, UHF	No-hole trunk mount
19.95	Newtronics MOR	Low, High, UHF	Hole mount
22.95	Newtronics MOC	Low, High, UHF	Hole mount, swivel base
24.95	Newtronics MOG	Low, High, UHF	Gutter mount
17.00	Antenna Specialists AV3	118-470	*Hole mount, mostly air band
18.25	Antenna Specialists ASPR157	130-470	Gutter mount, subminiplug
15.50	Antenna Specialists ASPC201L	108-512	*Hole mount

* indicates PL259 connector instead of "Motorola" type. Cable is included with all above mobile antennas.

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SATELLITES

Bill Blomgren, Editor

Send information about satellite frequencies which you have received with type of traffic heard, orbital data, hobby receiving equipment and antennas and questions pertaining to satellite monitoring to: Bill Blomgren, 505 E. Mulberry, #3, Normal, IL 61761.

EVALUATION OF VANGUARD LABS 407A FREQUENCY CONVERTER

For quite some time now I have been discussing with you the different types of satellites that can be monitored with the aid of low cost converters. Until recently I had never tried a converter. All of my satellite monitoring had been accomplished with the aid of some rather expensive and bulky surplus monitoring hardware. Since it didn't seem quite right that the satellite editor had never tried a converter, I decided to purchase one to see first hand if the information I had been giving out was correct.

I decided to have a converter built for the ATS-1 and ATS-3 satellites since these satellites have the greatest quantity of clear voice transmissions. My first choice for a converter manufacturer was the Hermes Research and Development Company but with the recent death of the company's owner the Hermes Company had gone out of business. I finally decided to try Vanguard Labs in New York. I had always been reluctant to deal with Vanguard Labs primarily because I could never get them to send me any product literature.

After some thought I decided to go ahead and order a Vanguard converter if for no other reason than to give the RCMA members an evaluation of the company and its product. As recommended in their hard to acquire literature, I enclosed a certified cashiers check so as not to delay my order. I ordered their model 407A frequency converter with an input frequency range of 135-138 MHz and an output frequency range of 35-38 MHz. Before placing my order I called Vanguard Labs to verify the price. The person who answered the phone was both courteous and helpful and indicated that the price was $60.00. This price included the building of the converter and the shipping costs.

The Vanguard people indicated that delivery time was about 10 days but I had anticipated anywhere from 4 to 6 weeks. My order was mailed to Vanguard on March 6, 1980, and my check was cashed on March 12, 1980. On March 26, 1980, my converter was delivered. Like any good radio enthusiast I immediately removed the converter from the box and cracked the case to look inside. The case itself was not very impressive and appeared to be a home brew construction. The inside of the converter was another matter. I was quite impressed with the layout and construction of the circuit board and with the overall internal workmanship. After putting the case back together I decided to give it the acid test and hooked it up to my Bearcat 210.

Hook-up is quite simple if you have a 12 volt DC power supply. Since the unit only draws about 30 MA of current almost any well-filtered power supply will do, or for that matter you could even run the converter in your car as a mobile. Once you have located a power supply you merely connect the converter between the antenna you wish to use and your scanner. The converter is also supplied with a second antenna input jack that will automatically switch directly to your scanner when the converter is turned off. This will allow you to use a separate antenna for satellite use without having to disconnect it when you switch off the converter. In my case I used a separate antenna for the satellites and left my regular telescope antenna screwed into the Bearcat 210. This allowed me to receive satellite signals in the 35-38 MHz range on the scanner and still use the 42 MHz range for State Police and the VHF high band and UHF band as well. Some harmonics were generated in these ranges by the converter but I was still able to scan many regular police and fire channels at the same time I was scanning the satellite channels.

Satellites continued

The 407A converter claims a 30-40 db gain factor so I decided to try it with an omni antenna cut for 155 MHz. The antenna was tower-mounted at about 40'. When I flipped on the converter and punched in the ATS channels I found to my surprise that I could hear a telephone patch from Stanford University in California to their research station near the South Pole. This conversation was being relayed through the ATS-3 satellite. Since this was accomplished without a beam and with an antenna cut for the wrong frequency range I was quite impressed. This Vanguard converter seems to be quite sensitive.

Since I live in an apartment without the benefit of an outside antenna I decided to see just how good this converter really was. When I got home I connected a magnet-mount unity gain mobile antenna cut for 155 MHz to the converter with about 16' of small RG cable. I then connected the converter and turned it on. After moving the antenna around inside the apartment I finally found a spot where I could actually receive the ATS-3 satellite on a regular basis without the aid of an outside antenna. This was accomplished from a ground floor apartment. At times the signal was marginal and the location of the antenna within the room was critical but it did work. I now listen to ATS-3 on a regular basis from my apartment and am quite impressed with the Vanguard 407A converter.

While the use of a good outside antenna such as a Cushcraft model P137-20T circularly polarized beam ($71.25) is recommended, this little experiment indicates that you can receive the ATS satellites on a regular basis with almost anything. One small problem I did discover was that when I programmed in the ATS channels I had to program them 5 KHz high. Instead of entering 35.600 MHz for 135.600 MHz, I found that my reception was better if I entered 35.605 MHz. This would tend to indicate that the converter was tuned off frequency slightly but this was no great problem and did not affect performance. I also found that some aircraft transmissions occur on the ATS channels from time to time but this was not a serious problem either.

After testing the converter in a base configuration I decided to try it mobile. Since I was headed for a meeting in Ohio some 300 miles away I figured this would be a good chance to try it. I decided to use the same 155 MHz unity gain magnet-mount antenna I had used in my apartment. After placing the antenna in the center of the roof of my car I connected both the converter and the Bearcat 210 to a power cord with a cigarette lighter plug. I then plugged them in and took off. Almost immediately I began to receive paging singals from a dial access paging system in Canada that uses 149.260 MHz. These signals are within the passband of ATS-3 and are passed through the satellite and appear at 135.640 MHz. These same signals can also be heard on ATS channel 5 (135.645 MHz). The performance of the converter in a mobile configuration was very similar to its operation in my apartment. Sometimes the signals were good and at other times they were marginal. It was, however, possible to receive clear voice transmissions from the satellite while moving in a car. During the trip I monitored telemetry and voice from research ships in the Pacific and conversations from a naval base in Puerto Rico.

Summary

The Vanguard Labs 407A frequency converter proved to be a good converter with sufficient gain to receive at least ATS-3 from an omni antenna improperly cut. I feel that with a good circularly polarized beam antenna both ATS-1 and ATS-3 could be received with excellent results. This converter provides a low cost answer to satellite monitoring and one which almost any RCMA member could set up using their current monitoring system. The 407A converter is compact and portable and can be used in either a base or mobile configuration. There is quite a lot of clear voice traffic on the ATS channels especially at night and I think most RCMA members would find this type of monitoring of interest especially if you can do it for only $60.00.

Where to get a converter

Vanguard Labs
196-23 Jamaica Avenue
Hollis, New York 11423
Phone Number: (212) 468-2726
Converter #407A
Input Frequency: 135-138 MHz
Output Frequency: 35-38 MHz
With BNC Connectors
Price: $60.00

Where to get a circular beam

Cushcraft Corporation
P.O. Box 4680
48 Perimeter Road
Manchester, N.H. 03108
Phone Number: (603) 627-7877
Antenna #P137-20T
Frequency Range: 135-138 MHz
Price: $71.25

Satellites continued

The Volano

While I was preparing this month's column at my apartment an interesting thing happened. As I was completing the column I switched on my converter and began to scan the channels for ATS-3. A few seconds later my Bearcat 210 locked onto ATS-3 Channel 2 (135.575 MHz) and a strong voice came on saying, "Washington, this is Rescue OPS, I need a telephone patch with the coroner". After a few minutes of monitoring I realized that I was hearing satellite traffic from the federal rescue operations at the Mount St. Helens volcano eruption site in the state of Washington. I had intended to only write two pages this month, but since this unusual ATS activity fits so well with this month's column, I decided to add a little more.

The use of the ATS-3 satellite for rescue communications at Mount St. Helens lasted for about one week and was culminated by a visit to the volcano by President Carter. Based on what I have been able to determine from my monitoring, the local officials at the site of the eruption were experiencing a great deal of difficulty with communications from the disaster site to the outside world. It was initially impossible to even get one telephone circuit into the base camp. Because of these problems, the state of Washington contacted the Air Force Rescue Coordination Center (AFRCC) at Scott Air Force Base in Illinois for help in solving their problem.

Once the AFRCC accepted the mission, a C130 transport aircraft was launched with a specially equipped jeep for use at the disaster site. Upon arrival the jeep was unloaded and driven to the base camp near the volcano for use as a communication link with the outside world. This jeep contained a complete package of synthesized radios capable of communicating on any frequency from HF to UHF. The jeep also had the capability of patching from one radio to another. This cross patching ability made it possible to patch vitually any form of communications into the satellite for "extension" to anywhere in the world.

One of the primary missions of this jeep communications system was the establishment of a good quality telephone circuit that could be used by the local officials at the base camp until such time as a more traditional telephone circuit could be established. Since the "RCC" at Scott Air Force Base did not have phone patch capability on the ATS frequencies the General Electric Research Center at Schenectady, New York, volunteered to act as the telephone patching center. This station known as "GE-1" also acts as the net control for a number of research projects and routinely communicates and monitors the two ATS satellites.

When the decision was made to use ATS-3 all of the regular satellite users were asked to clear channel 2 (135.575 MHz) until further notice. Those who required communications on a short term basis were allowed to use channel 4 (135.625 MHz) but only on reduce power so as not to affect the rescue mission. Once the satellite telephone circuit was established between the base camp and "GE-1" the jeep began to identify itself as "Rescue 621". The jeep was also equipped with a remote control system which allowed the local mission coordinator to have direct access to the jeep's communications system from the nearby command post. This communications system was used almost continually for all forms of emergency telephone calls for about 2-3 days until regular telephone lines were installed. The satellite was then used to back up the telephone system until the jeep was removed and the AFRCC mission was ended.

On May, 21, 1980, President Carter flew to the disaster site to inspect the area. Since the area was quite remote the White House Communications Agency made plans to use the ATS-3 satellite and the jeep as a back-up system for communications between the Presidential Party and the White House. As a test of this system "Rescue 621" patched a nearby aircraft control tower by radio through the jeep into the ATS-3 satellite. This signal was then patched by "GE-1" over telephone lines to Washington D.C. and a telephone conversation between the control tower in Washington state and an office in Washington D.C. was initiated. The quality of the circuit was excellent and proved the ability of the system to act as a back-up communications system for the President's visit. This same jeep pack system has apparently been used in the past for other disasters both inside and outside the United States. RCMA members may wish to consider monitoring the ATS satellites during other major disasters for possible communications links.

Beginners ??? Corner

Have a question? If you are a new scanner listener and don't understand something about monitoring that most everyone else seems to understand, send in your question. When possible, your question and the answer will be printed. No answers will be sent by return mail. Your name will not be printed. Write to: David E. Crowley, 7234 Balson Ave., University City, MO 63130.

This month we have no questions to answer but, fortunately, we do have two answers to questions posed in the July 1980 Newsletter.

One reader who lives about a mile from Chicago's O'Hare airport discovered a neat trick to eliminate multiple image interference from his Bearcat 250 which is connected to a rooftop antenna. He simply instaled the collapsible indoor antenna,which comes with the set,in addition to the outdoor antenna. By adjusting the length of the indoor antenna to about 17 inches, he was able to eliminate the unwanted signals entirely, in an area that contains more radio conjestion than any other place on earth. Congratulations!

With respect to the question about scanner preamplifiers, a member sent me a catalog from Capri Electronics, Route 1, Cannon GA 30520. In addition to VHF preamplifier kits, Capri lists unscramblers, scanner recording couplers and VOX (Voice operated switch) kits. The reader reports a very favorable relationship with Capri.

Beginners tip for the month: Your Beginners Corner editor is preparing a major contribution for the Public Safety - Central column, and is also under severe work-related stress. When the smoke clears, the tips for the month will reappear. Thank you for your patience.

FCC TOPICS

George DuBois, Editor

Send FCC news and information of interest that relates to two-way communications above 30 MHz and questions regarding the FCC Rules and Regulations to: George DuBois, 10048 NE Campaign, Portland, OR 97220.

Well, the weather here in the Northwest was pretty lousy in May and most of June. You know, the usual, a little rain, a little volcanic ash. No doubt it'll be downright hot by the time you read this. So, I'm going to continue from where I left off in July, namely the Forestry-Conservation Radio Service, in particular, the channels for state use. These are the channels that are allocated to state governments according to a geographical assignment plan. Of course, if your state forestry department is on VHF hi-band, you can pretty much rule these channels out. Even so, there could be your state parks on them, or maybe your state fish and game division.

Here are the channels available by state, in more or less alphabetical order:

Al., Ma., Md., NC.,	Oh. -	31.34, 31.46, 31.54
Ar.,	Or. -	31.58, 31.70, 31.82, 31.94
Az.,	Co. -	31.30, 31.42
	Ca. -	31.14, 31.26, 31.58, 31.70
Ct., In., Pa., Va.,	Wi. -	31.54, 31.66
De., Me.,	Vt. -	31.62, 31.74
Fl., Ky., NH.,	Tn. -	31.86, 31.98
Ia., Mt.,	Ut. -	31.14, 31.26
Ks., NM.,	SD. -	31.58, 31.70
La.,	Ok. -	31.06, 31.18, 31.38, 31.50
Ms., Mo.,	Tx. -	31.10, 31.22, 31.30, 31.42
ND., Nv.,	Wy. -	31.82, 31.94
	NY. -	31.26, 31.86, 31.98
RI.,	Ak. -	31.14, 31.26, 31.54, 31.62, 31.74
	SC. -	31.06, 31.18, 31.78, 31.90
	Wa. -	31.06, 31.18, 31.34, 31.46, 31.54
	WV. -	31.62, 31.82, 31.86, 31.98
Any state -		30.86, 30.90, 30.94, 30.98, 31.02
(Shared with other services)		

You skip chasers should keep this list handy. The only thing is that the F2 peak coincides with minimum activity in this service, and also they may not be used at all in your geographical area of interest. But it just may help you log that last state.

I also have a few actual allocations on the 170 mHz channels mentioned in July, the ones exclusively for the detection and prevention of forest fires. I cannot vouch for the accuracy of this information nor accept any responsibility for it's validity. (In other words, if they're good, remember where you got them. If not, tough luck.)

Al.- 170.475
172.275

Ar.- 170.575
172.375

Ga.- 171.425
172.275

Id.- 172.225
171.475
172.375
170.425

Md.- 172.275

Mi.- 171.575
171.425

Ms.- 171.425

Mt.- 172.225
171.475

Ok.- 172.225

Or.- 170.575

Tn.- 170.475
170.275

Tx.- 172.375
170.425
170.575

Vt.- 170.475
171.425

Va.- 170.475
171.425

Wa.- 171.425

172.275 and 171.475 are reserved for repeater use, where required, so where you see them listed, it no doubt is a repeater system.

And one final point: I forgot to mention the T-band channels available, although I really don't think you'll find much forestry activity on UHF. The available channels are from the Public Safety pool, as outlined in the December column. If you missed that, and live in one of the ten largest urban areas in the country that have T-band (470-512) channels, send me a self-addressed postcard and I'll give you the T-band channels available for Public Safety use (police, fire, etc.) in your city.

Business, Etc.

Chuck Gysi, Editor

This column is for reporting frequency and radio system information for the following varied services: business, forest products, petroleum industry, special industrial, manufacturers, news media (behind-the-scenes radio, TV & newspaper), motion picture industry, security (private patrol, detective agencies, campus security & police, amusement park & stadium security, shopping center & mall security, plant/business/hotel security, etc.), General Mobile Radio Service (GMRS), mobile phone/RCC & paging, trucking firms, bus lines, taxi cabs, tow trucks, utility companies (private & municipal water, power, electric, gas, telephone, etc.), and all school & college related frequencies. Send information and questions pertaining to the radio services covered in this column to: Chuck Gysi, P.O. Box 216, Willow Grove, PA 19090.

There's not much left of the summer. Pretty soon fall weather will arrive. If you did a little traveling this summer, perhaps you came up with some amusement park frequencies or other interesting channels. If so, send them in to the respective editors. We all need your input to keep us No. 1. Here are this month's contributions:

News Media/Film

From RICH (PA-027): WTAE radio in Pittsburgh has switched from 450.050 to 450.0875 for traffic reports on "Air Traffic Alert." Input to repeater is 455.0875.

Unfortunately, that is all for this month's News Media/Film category. Several months, many members wrote to our club saying that they wanted a news media column in the newsletter. This is that column and is probably the most popular section of Business Etc. But there is a lack of input at this time. We need more frequency lists. Most major cities' news media lists have already run in this column including many smaller cities. As of press time, we still have not received frequency lists for the following metro areas: St. Louis, Detroit, Dallas-Fort Worth, Miami, Cleveland, Houston, Denver, and many others. Whether your town is large or small, frequency lists are needed. Please send them in to the above Willow Grove address.

GMRS

There's lots to be heard on the General Mobile Radio Service band. But nobody is sending in information to tell other members. Please send in any GMRS material or frequencies that you know of.

Business

From KEN (IL-???): Some Illinois business freqs--

151.895	KBJ	342	R.B. Stephens Construction/Carbondale
153.080	KBR	609	Firestone Tire and Rubber Co./Quincy
153.140	KSO	512	Monsanto/Sauget
153.200	KDT	952	General Electric/Cicero
153.230	KRH	703	General Electric/Bloomington
153.290	KFU	359	ITT/Morton Grove
153.380	KEX	910	PPG Industries/Mount Zion
153.380	KRS	471	American Hospital Supply/Waukegan
157.680	KUY	976	Southern Illinois Cable TV/Murphysboro
157.680	KUY	977	Southern Illinois Cable TV/West Frankfort
153.320	KSX	997	Ford Motor Co./Chicago
153.320	KLM	437	Ford Motor Co./Chicago Heights
158.280	KFC	264	Swift Co./Rochelle
462.250	KLG	780	Motorola Inc./Schaumburg
462.450	KRR	708	Alton Box and Board Co./Alton

Motor Carrier

CHICAGO TRANSIT AUTHORITY SYSTEM

From Mike (IL-044):

453.325	KLS 562	Selective signalling of buses
453.225	KLU 214	City-wide voice communication with buses
453.275	KLU 215	Selective signalling of buses
453.375	KLU 216	Voice communication with selected bus
453.325	KLY 753	Voice communication with selected bus
453.475	KLY 754	Voice communication with selected bus
453.525	KLY 755	Voice communication with selected bus
453.575	KLY 756	Voice communication with selected bus
470.5375	KYT 872	Supervisory dispatching
470.6375	KYT 872	Supervisory dispatching
153.740	KLS 561	Emergency vehicle location signpost transmitters
44.54	KSA 977	Operations (between supervisory vehicles or portables and Operations Control Center)
44.60	KJF 216	South Shops Stores Dept., radio technicians, portables between supervisors and security)
44.60	KL 7830	Portables-garage personnel
470.9875	KYT 938	Rapid Transit division operations
471.0375	KYT 938	Rapid Transit division operations
471.0625	KYT 938	Rapid Transit division operations
471.0875	KYT 938	Rapid Transit division operations
471.1125	KYT 938	Rapid Transit division operations

From JOE (Ny-091): The Metropolitan Transit Authority (MTA) uses the following frequencies in New York City:

158.775 Bronx
158.805 Queens
155.925 Brooklyn

Mobile Phone/RCC

CELEBRITY/VIP MOBILE PHONE USERS

From Rick (SF-002):

As promised last month, here is an exclusive list of mobile telephone licensees right from FCC files.

California

Paramount Pictures Corp./Hollywood/1 UHF phone
Robert Stigwood Corp./Hollywood/1 UHF phone
Frank Sinatra/Hollywood/1 high-band phone
ABC Records Inc./Los Angeles/1 high-band phone
Muhammad Ali/Los Angeles/1 high-band phone
American Broadcasting Co./Los Angeles/2 high-band phones
American Nat'l Red Cross/Los Angeles chapter/1 high-band phone
Automobile Club of Southern Calif./Los Angeles/2 high-band phones
Warren Beatty/Los Angeles/1 UHF phone
Bonaventure Hotel/Los Angeles/1 UHF phone
City of Los Angeles/Los Angeles/7 high-band phones
County of Los Angeles/Los Angeles/9 high-band phones
David Crosby/Los Angeles/1 high-band phone
Dick Clark Productions/Los Angeles/1 high-band phone
George Foreman Development Corp./Los Angeles/2 high-band phones
S.I. Hayakawa/Los Angeles/1 high-band phone
Norman Lear/Los Angeles/1 high-band phone
Los Angeles Dodgers/Los Angeles/1 aircraft UHF phone
Los Angeles Herald-Examiner/Los Angeles/2 UHF phones
Motown Records Corp./Los Angeles/1 high-band phone
Graham Nash/Los Angeles/1 high-band phone
Occidental Petroleum Investment Co./Los Angeles/1 aircraft UHF phone

Freq _____ Mode _____ Date _____ Time _____Z

Callsign _____ Agency _____

Location _____

Remarks:

Name & Member # _____

Freq _____ Mode _____ Date _____ Time _____Z

Callsign _____ Agency _____

Location _____

Remarks:

Name & Member # _____

Freq _____ Mode _____ Date _____ Time _____Z

Callsign _____ Agency _____

Location _____

Remarks:

Name & Member # _____

Freq _____ Mode _____ Date _____ Time _____Z

Callsign _____ Agency _____

Location _____

Remarks:

Name & Member # _____

Freq _____ Mode _____ Date _____ Time _____ Z

Callsign _____ Agency _____

Location _____

Remarks:

Name & Member # _____

Freq _____ Mode _____ Date _____ Time _____ Z

Callsign _____ Agency _____

Location _____

Remarks:

Name & Member # _____

Freq _____ Mode _____ Date _____ Time _____ Z

Callsign _____ Agency _____

Location _____

Remarks:

Name & Member # _____

Freq _____ Mode _____ Date _____ Time _____ Z

Callsign _____ Agency _____

Location _____

Remarks:

Name & Member # _____

BUSINESS, ETC CONTINUED

Paramount Pictures Corp./Los Angeles/2 high-band phones
Ronald Reagan/Los Angeles/1 low-band phone
Burt Reynolds/Los Angeles/1 UHF phone
Telly Savalas/Los Angeles/1 UHF phone
Donald Sutherland/Los Angeles/1 high-band phone
20th Century Fox Film Corp./Los Angeles/5 UHF phones
Reggie Jackson Enterprises/Oakland/1 UHF phone
Unification Church/Pasadena/1 high-band phone
KCBS/San Francisco/1 high-band phone
Francis Coppola/1 high-band phone/San Francisco
Werner Erhard/San Francisco/1 high-band phone

New York Metro

Mario Biaggi/Bronx/1 high-band phone
City of New York/Brooklyn/District Attorney's office/1 UHF phone
Press Photo Service/Flushing/1 high-band phone
Queens Tribune/Flushing/3 high-band phones
Doubleday & Co./Garden City/1 aircraft UHF phone
Pan American World Airways/Jamaica-JFK Airport/1 UHF phone
City of Long Beach Police Dept./Long Beach/1 high-band phone
American Broadcasting Co./New York/5 UHF phones in Los Angeles, 2 high-band phones in Los Angeles, 2 high-band phones in San Francisco, 12 RCC UHF phones in Los Angeles.
CBS Inc./New York/2 high-band phones in Washington, 2 aircraft UHF phones in New York, 1 high-band phone in New York, 1 high-band phone in Washington.
Con Edison/New York/3 high-band phones and 1 low-band phone
Dow Jones & Co./New York/1 aircraft UHF phone
Educational Broadcasting Corp./1 high-band phone/New York
First National City Bank/New York/2 aircraft UHF phones
National Broadcasting Co./New York/2 high-band phones in Los Angeles, 6 UHF phones in Los Angeles, 1 low-band phone in Los Angeles, 1 high-band phone for use anywhere in United States
National Review/New York/1 UHF phone
New York Times/New York/1 high-band phone
Newsweek Magazine/New York/1 low-band phone
Mike Nichols/New York/1 high-band phone
N.Y. Governor's Office/New York/1 aircraft UHF phone
RCA Corp./New York/11 high-band phones
Drug Enforcement Administration/New York/1 high-band phone
Laurance: Nelson & David Rockefeller/White Plains/2 aircraft UHF phones
Time Inc./White Plains/3 aircraft UHF phones
Nuclear Reactor Carriers/Bayonne, NJ/1 high-band phone

Utility

PART VI--LOS ANGELES CITY WATER AND POWER SYSTEM

173.25 MHz system

The frequency 173.25 MHz (Channel 4) has been assigned to the Haynes Generating Station and Valley Generating Station for communications within those facilities. The system has been designed for independent operation at these facilities but care must be taken by operators of mobile units and base stations at one facility to ensure they are not interfering with operators at the other facility. This system also is used for paging purposes within these facilities.

Base station operators must transmit their FCC assigned call sign at the end of each series of transmissions. Mobile unit operators communicating solely with other mobile units must transmit the assigned call sign KY 3633 when clearing the frequency.

Security

MISCELLANEOUS WASHINGTON AREA SECURITY

From Marv (MD-014):

151.955	KVF 474	Washington Hospital Center
33.08	KQS 640	Sibley Hospital
155.205		George Washington University Hospital
37.98	KLJ 280	Providence Hospital
151.775		Frederick Hospital
157.450		Columbia Hospital for Women
165.2625		St. Elizabeth's Mental Hospital

School

WASHINGTON AREA SCHOOL SECURITY

From Marv (MD-014):

151.745	KJO 549	American University
151.715	KJQ 813	George Washington University
151.685	KJI 224	Georgetown University
39.58		Montgomery College
155.655		Prince Georges College
154.540	KEI 863	Columbia Union College, also 39.58
43.00	KGM 761	Dela Salle College

Freak Freqs

WINDY CITY AREA FREQUENCIES

From Dennis (IL-026):

464.350	KSK 648	Playboy Enterprises/Chicago R
151.685	KLG 251	Art Institute of Chicago/Chicago
464.925	KPG 449	Field Museum of Natural History/Chicago
464.375	KYX 976	Marriott's Great America/Gurnee R
151.895	KYI 865	Sycamore Speedway/Sycamore
35.98	KCJ 389	William Wrigley Jr. Co. (owner of Chicago Cubs)
151.925	KSI 593	Boy Scouts of America/Chicago
151.955	KSG 620	Boy Scouts of America/Chicago (also KEP 979)
154.600	—	Cantigny 1st Division Museum/Wheaton
464.850	KRS 596	Luv Machine Racing Team Inc./Addison R
472.6875	KBJ 745	McDonalds Corp./Oak Brook R
471.8625	KZZ 201	Catholic Archdiocese of Chicago/Chicago R
154.515	KAG 865	Illinois Railway Museum Inc./Union

photo department

Send photographs of custom monitor listening posts, unusual or extensive monitor or two-way antenna systems, user station consoles (PD, Fire, Paramedics, etc.) or other monitor/two-way related equipment of interest. Photographs must be 3 x 5 inches or larger, black-and-white with good contrast, sharply focused and attractively composed. Each photo must be accompanied by details and explanations of equipment. Photos will not be returned. If you have questions, write first and please include an SASE. Send photos or write to: Mike Redman, P.O. Box 1177, St. Charles, MO 63301.

Railroads

Ken Fitzgerald, Editor

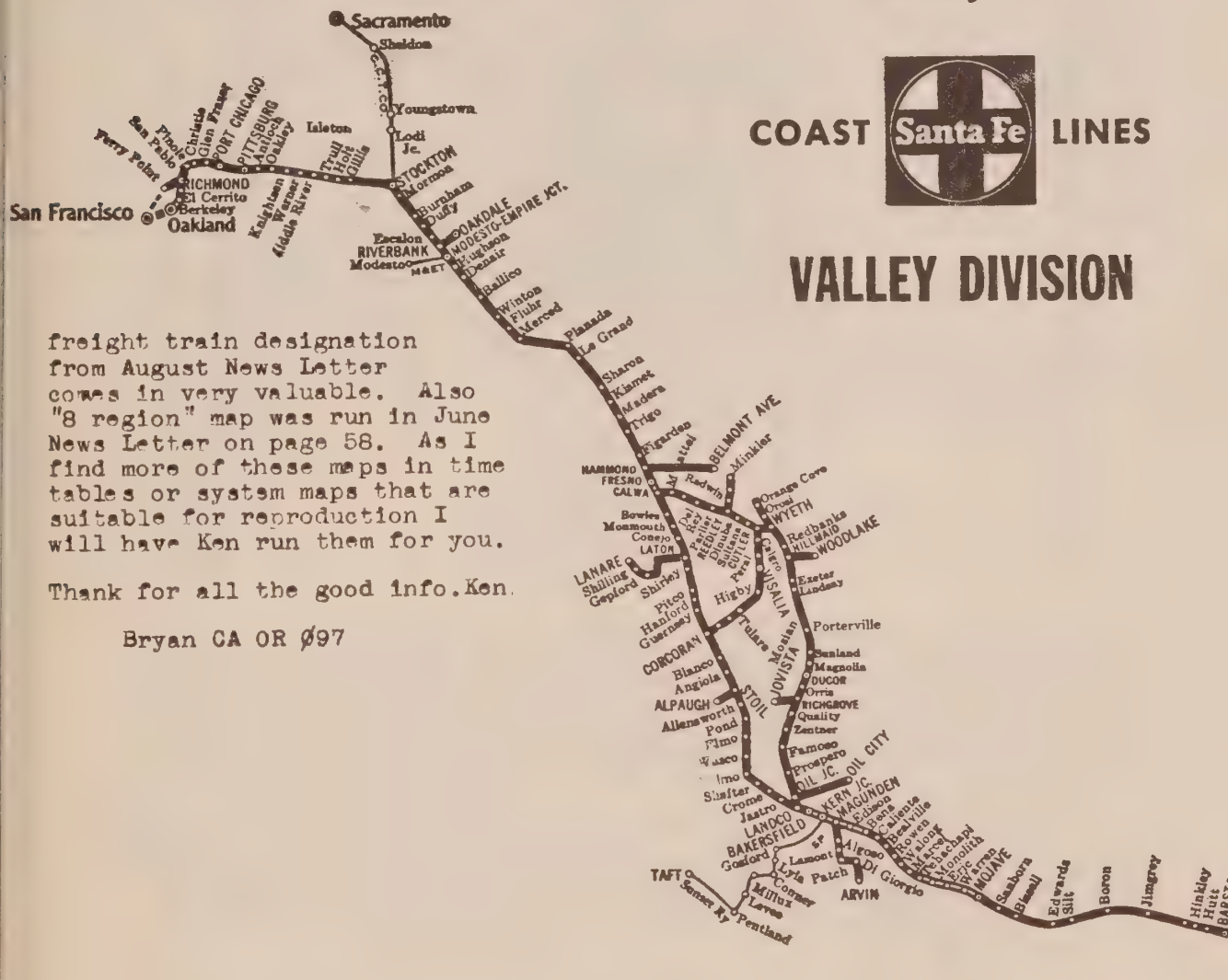
Send information about railroad frequencies and their uses, radio system details, tips for monitoring railroads, explanations of railroad jargon and related information and questions to:

Send information about railroad frequencies and their uses, radio system details, tips for monitoring railroads, explanations of railroad jargon and related information and questions to: Ken Fitzgerald, 121 East Hackberry, Enid, OK 73701.

This month's map is AT & SF's or Santa Fe "9 region" as described in Ken's article last month. It is interesting listening to the train-masters on the PBX channels discussing "LINE UPS" for the symbol trains. This is where understanding the freight train designation from August News Letter comes in very valuable. Also "8 region" map was run in June News Letter on page 58. As I find more of these maps in time tables or system maps that are suitable for reproduction I will have Ken run them for you.

Thank for all the good info. Ken.

Bryan CA OR Ø97



PBX	SIERRA PK.	CA	ATSF	PBX GTR. LA AREA	F3	R	160.260
PBX			UP	PBX SYSTEM WIDE		R	160.290
PBX	CRESTLINE	CA	ATSF	PBX CAJON PASS S.B. CITY	F4	R	160.335
RD			WP	ROAD SYSTEM WIDE	RD	S	160.380
CAR	VERNON	CA	ATSF	HOBART YD CARMEN R		IN	160.440
RD			ATSF	ROAD SYSTEM WIDE	RD	S	160.650
YD			UP	YARD SYSTEM WIDE	YD	S	160.680
RD			UP	ROAD CH SYSTEM WIDE	RD	S	160.740
RD	STA. MARIA	CA	SMV	TERMINAL SEE 161.175		R	160.770
PBX	RUNNING SPRINGS	CA	SP	PBX GTR. S. B. AREA	F2	R	160.890
RD			DRGW	ROAD SYSTEM WIDE	RD	S	160.920
PBX	OAT MTN.	CA	SP	PBX GTR. L.A. AREA	F3	R	160.950
RD	WILMINGTON	CA	HBL	TERMINAL A STREET		S	160.980
MOW			UP	M OF W SYSTEM WIDE		S	161.025
PBX	RUNNING SPRINGS	CA	SP	PBX SEE 160.890	F2	IN	161.040
CAR	VERNON	CA	ATSF	HOBART YD CARMEN R		R	161.070
RD			BN	ROAD SYSTEM WIDE	RD	S	161.100
RD	VERNON	CA	LAJ	YARD CARMEN ETC CH		S	161.130
PBX	OAT MTN.	CA	SP	PBX SEE 160.950	F3	IN	161.160
YD			BN	YARD SYSTEM WIDE	YD	S	161.160
RD	STA. MARIA	CA	SMV	TERMINAL SEE 160.770		IN	161.175
YD	VERNON	CA	ATSF	YARD HOBART	F2	S	161.370
PBX	CRESTLINE	CA	ATSF	PBX SEE 160.335	F4	IN	161.460
PBX	SIERRA PK.	CA	ATSF	PBX SEE 160.260	F3	IN	161.490
PBX			UP	PBX SYSTEM WIDE		IN	161.520
RD			SP	ROAD SYSTEM WIDE	RD	S	161.550
RD	WILMINGTON	CA	HBL	TERMINAL A STREET		S	161.550

CAR	VERNON	CA	ATSF	HOBART YD CARMEN R		R	161.070
CAR	VERNON	CA	ATSF	HOBART YD CARMEN R		IN	160.440
PBX	SIERRA PK.	CA	ATSF	PBX GTR. LA AREA	F3	R	160.260
PBX	SIERRA PK.	CA	ATSF	PBX SEE 160.260	F3	IN	161.490
PBX	CRESTLINE	CA	ATSF	PBX CAJON PASS S.B. CITY	F4	R	160.335
PBX	CRESTLINE	CA	ATSF	PBX SEE 160.335	F4	IN	161.460
RD			ATSF	ROAD SYSTEM WIDE	RD	S	160.650
YD	VERNON	CA	ATSF	YARD HOBART	F2	S	161.370
RD			BN	ROAD SYSTEM WIDE	RD	S	161.100
YD			BN	YARD SYSTEM WIDE	YD	S	161.160
RD			DRGW	ROAD SYSTEM WIDE	RD	S	160.920
RD	WILMINGTON	CA	HBL	TERMINAL A STREET		S	160.980
RD	WILMINGTON	CA	HBL	TERMINAL A STREET		S	161.550
RD	VERNON	CA	LAJ	YARD CARMEN ETC CH		S	161.130
RD	STA. MARIA	CA	SMV	TERMINAL SEE 161.175		R	160.770
RD	STA. MARIA	CA	SMV	TERMINAL SEE 160.770		IN	161.175
PBX	RUNNING SPRINGS	CA	SP	PBX GTR. S. B. AREA	F2	R	160.890
PBX	RUNNING SPRINGS	CA	SP	PBX SEE 160.890	F2	IN	161.040
PBX	OAT MTN.	CA	SP	PBX GTR. L.A. AREA	F3	R	160.950
PBX	OAT MTN.	CA	SP	PBX SEE 160.950	F3	IN	161.160
RD			SP	ROAD SYSTEM WIDE	RD	S	161.550
MOW			UP	M OF W SYSTEM WIDE		S	161.025
PBX			UP	PBX SYSTEM WIDE		R	160.290
PBX			UP	PBX SYSTEM WIDE		IN	161.520
RD			UP	ROAD CH SYSTEM WIDE	RD	S	160.740
YD			UP	YARD SYSTEM WIDE	YD	S	160.680
RD			WP	ROAD SYSTEM WIDE	RD	S	160.380

The above frequency lists are sorted by computer in two different ways. The information is the same in each sort, just the order in which the frequencys appear are different. OK, why the need for rehashing the same old same ol' stuff? The top list is by frequency order, so when your searching from 160.215 to 161.565 it's easier to figure out what 161.490 is. In fact the note says see 160,260. So you look to .26 line and note that it is a PBX and repeater output.

The second list is by carrier AT&SF or SP etc. then the locations or cities are sorted in order. This style of sort comes in handy if you are "rail fanning" an area and want to determine the frequency that the Union Pacific engine next to you is possibly transmitting on then the second sort is the one you want to use,

Bryan CA OR Ø97

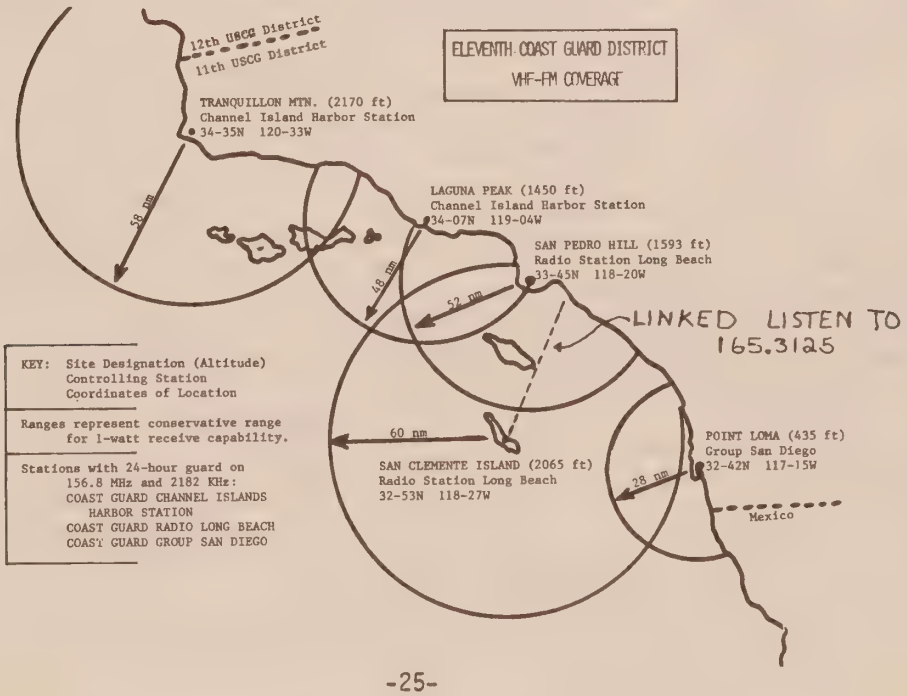
VHF Marine

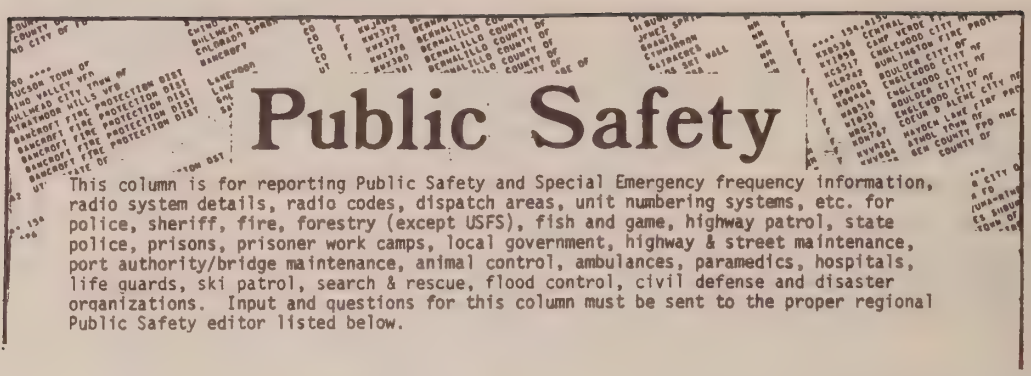
Rod O'Connor, Editor

Send information, articles, frequencies and how they are used and questions that relate to private, commercial and Coast Guard VHF maritime and inland waterways radio communications to: Rod O'Connor, USCG Group, 259 High St., South Portland, Maine 04106.

LOS ANGELES WATERS VHF FREQS *FROM CA OR 097*

PAB	NEWPORT BEACH	CA	CO	HARBOR DEPT.	F2				45.400
PAB	LOS ANGELES HARBCA		CITY	LA HARBOR PATROL BOATS		KMG	511	S1	45.620
PAB	LOS ANGELES HARBCA		CITY	LA HARBOR PATROL BOATS		KMG	511	S1	45.740
PAB	NEWPORT BEACH	CA	CO	STATION 54 HARBOR DEPT.	F1	KLI275			45.920
PAB	AVALON HARBOR	CA	CITY	AVALON HARBOR PATROL					46.540
PAB	LONG BEACH HARBOCA		CITY	LB HARBOR DEPT					153.230
PO	LOS ANGELES HARBCA			HARBOR PILOT	65			P	156.275
SHP	LOS ANGELES HARBCA		ALL	ALSO CHANNELS 13 16	F6			P	156.300
PO		CA			66				156.325
COM	LOS ANGELES HARBCA		TUG	WILIMINGTON TRANS CO	F7				156.350
COM	LOS ANGELES HARBCA		TAXI	UNIVERSAL MARINE	10	KZA	941		156.500
COM	LOS ANGELES HARBCA		TUG	RED STACK TUG CO	10	KMJ	201		156.500
PO	LONG BEACH HARBOCA			LONG BEACH PILOT	12	KMA	370	B	156.600
NAV	USCG DIST 11	CA	ALL	SHIPS MOVEMENTS	13				156.650
PO		CA			73				156.675
PO	LOS ANGELES HARBCA			SAN PEDRO PILOT	14			B	156.700
PO		CA			74				156.725
GOV	USCG DIST 11	CA	ALL	DISTRESS CALLING	16				156.800
PO	LOS ANGELES HARBCA			HARBOR PILOT ONLY	77			P	156.875
COM		CA	TUG		18				156.900
COM		CA	TUG	OIL BARGES AND TUGS	19	KMB	270		156.950
PO	LOS ANGELES HARBCA			LOS ANGELES PILOT	20	KMB	466	B	157.000
GOV	USCG DIST 11	CA	USCG	CUTTERS AND HELICOPTERS	21A			S1	157.050
GOV	USCG DIST 11	CA	USCG	CHANNEL ISLANDS WORKING	21			S	157.050
GOV	USCG DIST 11	CA	USCG	SAR AND CIVILION LIAISON	22A			S1	157.100
GOV	USCG DIST 11	CA	USCG	SAN DIEGO WORKING CH	23			S	157.150
GOV	USCG DIST 11	CA	USCG	PRIM RCC FOR CUTTERS	83			S1	157.175
GOV	USCG DIST 11	CA	USCG	LONG BEACH WORKING CH	83			S	157.175
GOV	USCG DIST 11	CA	USCG	156.800 CH 16 REPEATER				R	165,312
GOV	USCG DIST 11	CA	USCG	3RD LEVEL SAR CH.				S	381.800





Public Safety

This column is for reporting Public Safety and Special Emergency frequency information, radio system details, radio codes, dispatch areas, unit numbering systems, etc. for police, sheriff, fire, forestry (except USFS), fish and game, highway patrol, state police, prisons, prisoner work camps, local government, highway & street maintenance, port authority/bridge maintenance, animal control, ambulances, paramedics, hospitals, life guards, ski patrol, search & rescue, flood control, civil defense and disaster organizations. Input and questions for this column must be sent to the proper regional Public Safety editor listed below.

PUBLIC SAFETY - WEST, CALIFORNIA - Eric Christensen, Editor

WELCOME TO SEPTEMBER 1980 RCMA PUBLIC SAFETY WEST-CALIFORNIA

Here it is July 2, 1980 and I am finishing up on the September issue! This tends to throw one's calenda off a bit. For those of you who have asked me, I have to have materials to the paste up crew by around the 4th to the 7th of the month. With this in mind, let's set our own deadline for getting materials to me as the 20th of the month prior to my due date. In other words, if I have to have all materials to paste up crew by August 4, your due date will be July 20 at my address: 2360 Brentford Rd., San Marino, CA 91108. New address will be printed in next issue. This one is still valid as mail can be forwarded to me, as I now reside in Orange County.

****

From DANNY (CA-OR-004):

Fire Nets-San Bernardino County

RED	154.325		S.Berdoo Co. Mutual Aid
WHITE	154.28		Statewide Mutual Aid
BLUE	154.025		Foothill/Montclair/Ontario/Upland
YELLOW	154.07		Desert & Colorado communities
GREEN	154.19		Valley & Mountain communities
ORANGE	154.385		S.Berdoo city
BROWN	153.83		S.Berdoo city & Colton ONLY
MTN. YELLOW	33.64	F1	Lake Arrowhead & west
MTN. BLUE	33.76	F3	Wrightwood
MTN. RED	33.44	F2	All Mountain communities
MILITARY	173.5875		Geo/Norton/Ontario Air Force Bases
MILITARY	435.075*		Norton Air Force Base

Fire Nets-Riverside County

154.445	Banning/Idyllwild
154.235	Corona
154.145	Hemet/Norco/Perris/Murietta
154.415	Rubidoux
150.345	March Air Force Base

Editor's note: Don't forget local CDF & USFS nets, either! (* A BC-250 image?)

****

Original source lost (sorry):

LOS ANGELES COUNTY FIRE DEPARTMENT-HAND CREWS

Paid professional crews manned by fire control laborers, civilian employees of the Los Angeles County Fire Dept.

CREW 2	Arroyo Seco
CREW 4	San Francisquito Canyon
CREW 5	San Dimas
CREW 8	Malibu
CREW 9	Bear Divide

INMATE CREWS

CREW 7*	Lake Hughes
CREW 12	Wayside Honor Farm (Castaic)
CREW 13	Malibu (Decker Canyon)

*Camp 7 is a juvenile camp used for mop up only, they are not allowed on an active fireline.

Above may be heard on L.A.Co. F.D. frequencies F2: 154.34 MHz. or F3: 154.40 MHz.

****

From ROGER (CA-LA-235):

Does anyone have any information re L.A. Sheriff Crescenta Valley Station # 12 (39.82 B/39.34 M Freq. 15) capabilities of operating on U.S.F.S. Angeles National Forest Freq. 171.575 MHz.? ANSWER: YES, L.A. Sheriff units from Crescenta # 12 do have U.S.F.S. radios in their vehicles in addition to their own L.A. Sheriff radios. I can attest to this with personal knowledge, as when I was in the Chilao area of Angeles National Forest, there was a mutual rescue operation between U.S.F.S. and L.A.S.O. units, with most communications on 171.575 MHz. and L.A.S.O. Freq. Henry (39.60 MHz). ERIC (CA-LA-045)

SEE ANGELES NATIONAL FOREST INFO-below!
From ERIC----Original source lost (sorry):

ANGELES NATIONAL FOREST

171.575 Repeater "KME22" Burnt Peak
172.375 Repeater input
415.225 Repeater (436.925 on a Bearcat 250)

Arroyo Ranger District -

15 Chilao (Crew 1)
16 Charlton Flat
110 Angeles Crest
111 Clear Creek
112 Red Box
114 West Fork
116 Sierra Madre
117 Chantry Flat

Saugus Ranger District -

35 Oak Flat
37 Red Mountain
38 Pine Canyon
39 Powerhouse
310 San Francisquito
311 Texas Canyon (Crew 3)
312 Pyramid Lake

Tujunga Ranger District -

54 Little Tujunga Canyon (Crew 5)
55 Big Tujunga Canyon
56 Mill Creek
57 Monte Cristo
58 Lopez Canyon
59 Soledad Canyon
510 Bear Divide
511 North Fork

Mt. Baldy Ranger District -

24 Dalton (Crew 2)
25 Rincon
26 Coldbrook
27 Crystal Lake
28 East Fork
29 San Dimas Canyon
211 Lower San Antonio Canyon
212 Mt. Baldy

Valyermo Ranger District -

44 Valyermo
45 Big Pines
47 Littlerock Canyon
49 Buckhorn
410 Prairie Fork

169.20 Air attack channel
166.56 South zone regional assistance, but try listening to 164.91 "South Zone"

All '1' units are district rangers; 11, 21, etc.

All '2' units are fire control officers 12, 32, etc.

From ERIC (CA-LA-045) & KARL (CA-OR-022):

PUBLIC SAFETY RADIO SYSTEM-SANTA BARBARA & SAN LUIS OBISPO COUNTIES

San Luis Obispo Sheriff

BLUE	460.150	R
YELLOW	460.475	R
RED	460.050	R
WHITE	460.050	S

Paso Robles Police Department
GREEN 1 460.125 R

Morro Bay Police Department.
GREEN 3 460.100 R

San Luis Obispo Police Department
GREEN 2 460.375 R

Grover City Police Department
GREEN 4 460.175 R

Arroyo Grande Police Department
GREEN 4 460.175 R

Pismo Beach Police Department
GREEN 4 460.175 R

Santa Barbara Sheriff

ORANGE	460.275	R
YELLOW	460.325	R
RED	460.050	R
WHITE	460.050	S

Guadalupe Police Department
GREEN 5 460.450 R

Santa Maria Police Department
GREEN 3 460.100 R

Lompoc Police Department
GREEN 1 460.125 R

Santa Barbara Police Department
GREEN 3 460.100 R
460.550 S Teleprinter

Carpinteria Police Department
GREEN 4 460.175 S (No repeater)

CLEMARS 460.025 R

****

More information re Santa Barbara & San Luis Obispo Counties will appear in the OCTOBER 1980 issue of RCMA. This additional information will include Agency identifier numbers, fire department frequencies, and Unviersity of California, Santa Barbara Police Department and California State Polytechnic University, San Luis Obispo Police Department radio systems within the Public Safety Radio Systems of San Luis Obispo and Santa Barbara Counties. Remember, CHP San Luis Obispo works on the WHITE channel (42.56 MHz B/42.72 MHz M) and CHP Santa Barbara works on the GREEN channel (42.54 MHz B/42.24 MHz M) EJC

From SKIP (CA-SD-):

San Diego Police Dept.
Unit Patrol Areas

****

From RICH (CA-AL-020):

POLICE DEPARTMENT-City of Oakland

Freq. 1: 156.090 R Sector Two East/South Beats 15-35
Freq. 2: 155.790 R Sector One Downtown/North Beats 1-14
Freq. 3: 155.850 S Information Access
Freq. 4: 154.920 S CLEMARS (Car to car)

Oakland Police Department "900" Code System

The 900 Code

Murder	187
Kidnapping	207
Robbery	211
Assault with Deadly Weapon	245
Rape	261
Lewd and Lascivious Conduct	288
Indecent Exposure	314
Disturbing the Peace	415
Disturbing the Peace - Auto	415A
Disturbing the Peace - Juvenile	415J
Disturbing the Peace - Investigate the Trouble	415C
Disturbing the Peace - Drinking	415D
Disturbing the Peace - Music Party	415E
Disturbing the Peace - Family Row	415F
Disturbing the Peace - Gang Row	415G
Burglary	459
Theft, Petty	484
Theft, Grand	487
Trespassing	602L
Vehicle Collision, Property Damage	901
Vehicle Collision, Personal Injury	901A
Ascertain if Ambulance Needed(Traffic Collision)	901B
Vehicle Collision, Drunk Involved	901D
Message Received	904
Abandoned Automobile	905
Person Breaking In	906
Out of Service	908
Out of Service,Meal	908A
Out of Service,Rest Relief	908B
Out of Service,Coffee	908C
Out of Service,Off Duty	908D
In Service	909
In Service, Meals	909A
In Service, On Duty	909D
Prowler Outside	910
Suspicious Person	912
Suicide	913
Attempt Suicide	913A
Phone Your Station	914
Phone Radio Room	915
Request Permission to Communicate with Field Unit	916
Permission to Communicate with Field Unit-Granted	917
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Person Screaming for Help	918
Car Prowler or Clouter	921
Drunk on Street	922
Drunk in Auto	922A
Drunk Inside Building	922B
Go to your Station	924
Give your Location	926
Unlawful Bonfire	927
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Investigate Possible Incendiary Device	928C
Explosion, Possible (Bomb Threat)	928P
Fire	929
Burglary Alarm	933
File Check, Vehicle	936
File Check, Person(s)	936A
File Check, Gun	936G
No Information in File	937C
Similar Information in File	937S
Matching Information in File	937M
Person You Are Checking is DANGEROUS*	937D
*Automatic cover sent unless cancelled by the unit requesting the check.	
Cancel Last Assignment	938
Meet the Officer	940
Officer Needs Assistance	940A
OFFICER NEEDS HELP	940B
Citizen Holding Prisoner	941
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Ambulance Requested	945A
Ascertain if Ambulance Needed(Non-traffic)	945B
Relieve the Ambulance	945C
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Patrol Wagon for Juvenile(s)	947J
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Investigate Report from Citizen	950
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Vicious Animal	955A
Noisy Animal	955B
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Auto - On Sidewalk	970A
Auto - Blocking Driveway	970B
Auto - In Restricted Zone	970C
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Stand By and Preserve the Peace	975
Insanity	5150
Insanity - Violent	5150)
Felony Hit and Run	20001
Misdemeanor Hit and Run	20002
Felony Drunk Driving	23101
Misdemeanor Drunk Driving	23102
Reckless Driving	23103
Auto Theft	10851

CALIFORNIA HIGHWAY PATROL
West Los Angeles Area
"PINK RADIO"

Map by ERIC
CA-LA-045

NOTE:

CHP South L.A. units
operate on WHITE 42.56 B/42.72 M

CHP West Valley units operate
on BROWN 42.50 B/42.82 M

CHP Central Los Angeles units
on BLACK 42.46 B/42.70 M

From ERIC (CA-LA-045): via San Gabriel Valley REACT News

POLICE: JARGON BY THE NUMBERS

Every occupation has its jargon.

But "shop talk" between police officers takes some sorting out.

An example: "Hey, Mad Dog (officers have funny nicknames for one another) — anything go down on a.m.s today?" The reply: "Yeah, it started out routine, but then we got a call at 1300 about a possible 211/207 at the bank. As soon as we want 97 at the 10-20, we say a 417, but there was no 211/207. We gunned down to pat the suspect and it still took a minute until we were able to get a 4 on it. Then it was 10-15 time with a big 98."

Basically, the first officer asked what happened of interest on the morning shift. He was told it was average stuff until 1 p.m. when the officer got a call of a bank robbery with a kidnap or hostage situation. He arrived at the bank, investigated and found the first call was unfounded but encountered a man with a gun instead.

The officer said he was forced to point his pistol at the man to conduct a field search. When the suspect was arrested, the officer put out a Code 4 to other units, telling them everything was under control. To go 10-15 means taking a ride to jail. And 98 is a favorite expression. It means the detail or assignment has been completed. To go 10-98 for the evening is even better — that's quitting time.

The 211/207 aren't numbers picked at random to identify but are sections in the California Penal Code. The 10 Code was devised by someone who obviously thought it easier to say, "10-97" rather than, unit has arrived at the scene."

Although each department uses its own codes, there are some basic examples.

If a man goes out and gets drunk, he becomes a 390. If he staggers about in public, he's a 647-F. If he makes it to his car, he's a 390-C, and if he quaffs too many "shooters" and passes out, he becomes a 390-D.

If the officers go to arrest the man and encounter resistance from bystanders, they might get involved in a major 415 disturbance. If the bystanders try to hit the officers over the head with rocks and bottles, they have committee a 245 and the officers are victims of a 242.

And the policemen probably would ask for the 404 or riot squad to help bail them out of the situation.

The 415 calls are broken down into subsections. A 415-E is a loud party or music while a 415-F is a loud family. Prevalent during hot summer nights are 415-G or gang fight calls.

Airplanes also have several references in police code books. A 903-L is a low-flying plane. If the pilot is stunting in unsafe air space he is 903-S and if he stunts and starts to crash, he becomes a 903-T, aircraft in trouble. If he hits the ground it's a 903 and police on the scene would ask for a 901, ambulance.

If an officer encounters a stray animal, he's dealing with a 905-S. If the animal makes a lot of noise, it's a 905-N and if it gets vicious, it becomes a 905-V. If the officer is bitten, he's a victim of 905-B and probably would ask for 906 assistance. A dead animal is a 905-D. A dead cat in the street usually is referred to as a "flat cat."

A crazy person is a 918. A violent crazy person is 918-V. If an officer takes one of these into custody, he effects a 5150. These persons are said to have, "toys in the attic." Sometimes they are referred to as, "rub "rubber ranch escapees," or else, "running a quart low." Others are,"not wound right."

Police also come in contact with several "dings" a day. This is short for ding-a-ling. When a "ding" becomes hostile toward an officer, he may be taken in for "contempt of cop."

A "ding" also may be referred to as an Adam Henry.

After booking an Adam Henry, an officer might tell another cop that the call went something like this: "Encountered Adam Henry, confirmed Adam Henry . . . booked same."

If something is BO, it doesn't smell bad, it's broken.

For example, the siren on a police car gets stuck. The officer tries to tell the dispatcher over the radio but she can't hear what he's saying because of the noise. She'd figure the officer either was in pursuit or had a BO siren.

Either way she'd tell him to roll up his window.

Police don't chase crooks, they "go in pursuit." It works the same if they are on foot or in a car, except that car pursuits often result in TCs or TAs. A TC is a traffic collision. A TA is a traffic accident. If the officer tells his didspatcher during the course of a pursuit that the "suspect's vehicle just TCd," everyone at the station breathes easier.

If the officer says, "city property involved," it means he crashed too, or else the suspect took out something like a street light with his car.

If the officer said the TC involved his "unit," a sergeant would go to the scene to inspect the damage to the patrol car.

Police cars aren't prowl cars or patrol cars anymore, but "units." Example: "I parked my unit in her driveway."

Many times, police will be sent to the scene of what is supposed to be a TC or a TA, but when they get there, traffic is moving smoothly.

The officer would tell his dispatcher, "I'm UTL-GOA." That means he was unable to locate (the incident) and that whatever the trouble was, it was gone on (his) arrival.

Heroin addicts are "hypes," because of the hypodermic needles they use to inject the drug. Cops don't like "hypes" for many reasons. Often, they are 459 (burglary) experts.

Cops call these types "Scroates" or "Dirtbags." If an officer can get a "Dirtbag" to "snitch" on his "main man" or supplier, he'll have made the suspect "roll over." To "roll over" also means to "spill the beans."

If the "Dirtbag" gives the officer good information, police will make "a pinch" or "collar," on the dealer.

And if justice is served (police slang about the judicial system isn't printable), the dealer will go to the "joint" or "slammer." These are names for the state penitentiary. "Cop talk" is not infallible, however, Police work is fast-paced and exciting. And when someone is shooting at you, you don't always remember that you're dealing with a 998.

That's why one department manual says, "If you cannot think of the proper code, speak in English."

San Gabriel Valley Tribune - October 11, 1978

From ERIC (CA-LA-045):

Monitor RCMA Administrative nets on 2 Meter Amateur Radio, Frequency: 145.18 R MHz. (144.58 MHz. input). This repeater is operated by the Pacific Telephone & General Telephone Companies Employees' Amateur Radio Association. They have been more than generous in allowing us to "monopolize" their frequency as we sometimes do. Than again, PT/GTE Ham Guys!! ERIC (CA-LA-045) Perhaps, we might get some of them interested in our club. JOIN IN with us, give us your thoughts on what we may be saying. If your'e not a ham YET, listen on your scanner to 145.180 MHz. (AND STUDY UP ON THAT ¢&*(%$#@ CODE!!!) I'm there, & so are many others. ERIC KA6IHT, BOB KA6JBL, BRYAN KA6IIX, JOE N6CRO, JOHN KA6JCX, BILL KA6IJA. -73's for now.....SEE you in OCTOBER!!!

LET"S GET SOME MORE INPUT TO THIS COLUMN SO THAT WE CAN REMAIN THE BEST!!!

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The following Military frequencies are a part of my files compiled from numerous sources. The 138 thru 143.6 MHZ region needs special note, in that it's done exclusively with Regency M-100. The radio works usually this low in frequency range with no underline no, modifications. The "band" is Hot, there is lots of activity and it is predominately US Navy or USMC. So if you live near one of these branches a M-100 is probably for you. The sensitivity is excellent even this far of the usual 146-174 range. I regularly listen to El Toro mobils and Base units from 15 miles away over flat terrain and an out side antenna.

Bryan CA OR Ø97

FEDERAL GOV'T and ★ MILITARY ★

Robert B. Grove, Editor

Send all Federal Government and Military frequencies (including those of military aircraft), radio system details, and related questions to: Robert B. Grove, Route 1-Box 156, Brasstown, NC 28902. Sensitive frequencies will not be published. Coast Guard material must go to the VHF Marine editor.

									99
FD	PENDLETON CP	CA	USMC	FIRE SAR SEE 138.600 R		RED	IN	.000	113
NEW	LONG BEACH	CA	USN	SHIPYARD CIVILANS139.575			IN	.000	466
NEW	SEAL BEACH NWS	CA	USN	BULLFROG OSCAR S140.8375			IN	.000	477
NEW		CA		RANGE TALK WEAK			IN	.000	486
	CRESTLINE	CA	USAF	NORTON AFB			IN	.000	566
	EL TORO MCAS	CA	USMC	CRASH				40.820	613
MIL	EL TORO	CA	USMC	TWR SAR			S	41.950	98
MP	ORANGE CO.	CA	ALL	STATION 16		KMA752		45.300	160
MP	PENDLETON CP	CA	USMC	MILITARY POLICE			R	138.025	110
MP	PENDLETON CP	CA	USMC	MP TACTICAL CHANNEL	T1		S	138.375	463
FD	PENDLETON CP	CA	USMC	FIRE SAR		RED	R	138.600	112
SP	LONG BEACH	CA	USN	SHORE PATROL 10 10 PAGIN	CH5		P	138.640	421
MIL	EL TORO	CA	USMC	LINE FOLLOW ME TRUCKS			S	138.720	96
MIL	EL TORO	CA	USMC	MP FIRE AMB	F2		S	138.740	95
NEW	SEAL BEACH NWS	CA	USN	BULLFROG OSCAR			S	138.850	464
MP	EL TORO	CA	USMC	MP FIRE AMB	F1		S	138.940	94
NEW	LONG BEACH	CA	USN	SHIPYARD CIVILANS			R	139.575	465
MP	PENDLETON CP	CA	USMC	MP TACTICAL CHANNEL	T2		S	139.675	462
MP	PENDLETON CP	CA	USMC	MILITARY POLICE S138.025			IN	140.000	111
SEC	LONG BEACH	CA	USN	GATE SECURITY DOD GUARDS	CH3		S	140.025	114
NEW	NORTH ISLAND	CA	USN					140.050	484
MIL	EL TORO	CA	USMC	CRASH			S	140.100	97
MIL	SANTA ANA MCAS	CA	USMC	CRASH			S	140.100	115
NEW				TWR TO GND			S	140.200	479
FD	LONG BEACH	CA	USN	L.B. NAVAL BASE FIRE STA	CH4		S	140.325	420
NEW		CA	USN	HULL NUMBER				140.375	480
NEW		CA		RUNNWAY TALK				140.525	481
NEW	SEAL BEACH NWS	CA	USN	BULLFROG OSCAR		BULLFROGR		140.837	476
SP	LONG BEACH	CA	USN	SHORE PATROL SEE 141.975	CH1		IN	140.975	362
	LOS ALAMITOS	CA	USN	AIR STATION				141.000	116
NEW		CA		RANGE TALK WEAK			R	141.500	485
NEW		CA	USN	PAGING VOICE				141.950	482
SP	LONG BEACH	CA	USN	SHORE PATROL SEE 140.975	CH1		R	141.975	117
SP	LONG BEACH	CA	USN	SHORE PATROL	CH2		S	141.975	363
NEW		CA		SECURITY ONE TO TWO				142.375	483
MIL	SEAL BEACH NWS	CA	USN	WEAPONS STATION	F1	BULLFROG		142.500	118
NEW	LONG BEACH	CA	USN	SONAR REPAIR			S	142.550	478
MIL	SEAL BEACH NWS	CA	USN	WEAPONS STATION	F2	BULLFROG		142.675	119
MP	SANTA ANA MCAS	CA	USMC	HELO BASE MILITARY POLIC			S	142.860	422
	MARCH AFB	CA	USAF					148.175	614
SEC	WILLIAMS AFB		USAF					163.000	534
PW	EDWARDS AFB	CA	USAF	MAINTENANCE CENTER				163.462	551
SEC	MARCH AFB	CA	USAF	SECURITY POLICE			S	163.462	552
	LOS ANGELES	CA	USAF	SPACE MISSILE SYS				163.462	553
SEC	MARCH AFB	CA	USAF	SECURITY POLICE				163.487	554
SEC	GEORGE AFB	CA	USAF	SECURITY				163.487	555
	LOS ANGELES	CA	USAF	SPACE MISSILE SYS				163.487	556
	MT. LAGUNA	CA	USAF					163.487	557
SEC	NORTON	CA	USAF	SECURITY POLICE				163.487	558
SEC	EDWARDS AFB	CA	USAF	SECURITY POLICE				163.487	559
	GEORGE AFB	CA	USAF					163.512	560
	LOS ANGELES	CA	USAF					163.512	561
	FT. MC ARTHUR	CA	USA	MG S AWOL NET				163.537	562
	EDWARDS AFB	CA	USAF	MAINTENCE				163.537	563
			ACE					163.537	564
	CRESTLINE	CA	USAF	NORTON AFB			R	163.562	565
			ACE					163.562	567
	NORTON AFB	CA	USAF					163.587	568
		CA	USAF	TRAFFIC				163.587	569

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NEW		CA		RANGE TALK WEAK			IN	.000	486
			ACE					163.537	564
			ACE					163.562	567
MP	ORANGE CO.	CA	ALL	STATION 16		KMA752		45.300	160
									99
	FT. MC ARTHUR	CA	USA	MQ S AWOL NET				163.537	562
		CA	USAF	TRAFFIC				163.587	569
	CRESTLINE	CA	USAF	NORTON AFB			R	163.562	565
	CRESTLINE	CA	USAF	NORTON AFB			IN	.000	566
	EDWARDS AFB	CA	USAF	MAINTENCE				163.537	563
FW	EDWARDS AFB	CA	USAF	MAINTENANCE CENTER				163.462	551
SEC	EDWARDS AFB	CA	USAF	SECURITY POLICE				163.487	559
	GEORGE AFB	CA	USAF					163.512	560
SEC	GEORGE AFB	CA	USAF	SECURITY				163.487	555
	LOS ANGELES	CA	USAF	SPACE MISSILE SYS				163.462	553
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SEC	MARCH AFB	CA	USAF	SECURITY POLICE				163.487	554
	MT. LAGUNA	CA	USAF					163.487	557
SEC	NORTON	CA	USAF	SECURITY POLICE				163.487	558
	NORTON AFB	CA	USAF					163.587	568
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MIL	EL TORO	CA	USMC	MP FIRE AME	F2		S	138.740	95
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FD	PENDLETON CP	CA	USMC	FIRE SAR SEE 138.600 R		RFD	IN	.000	113
MP	PENDLETON CP	CA	USMC	MILITARY POLICE			R	138.025	110
MP	PENDLETON CP	CA	USMC	MILITARY POLICE S138.025			IN	140.000	111
MP	PENDLETON CP	CA	USMC	MP TACTICAL CHANNEL	T2		S	139.675	462
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FD	LONG BEACH	CA	USN	L.B. NAVAL BASE FIRE STA	CH4		S	140.325	420
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NEW	LONG BEACH	CA	USN	SHIPYARD CIVILANS139.575			IN	.000	466
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SP	LONG BEACH	CA	USN	SHORE PATROL 10 10 P/GIN	CH5		P	138.640	421
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NEW	SEAL BEACH NWS	CA	USN	BULLFROG OSCAR		BULLFROGR		140.837	476
NEW	SEAL BEACH NWS	CA	USN	BULLFROG OSCAR S140.8375			IN	.000	477

Technical Topics

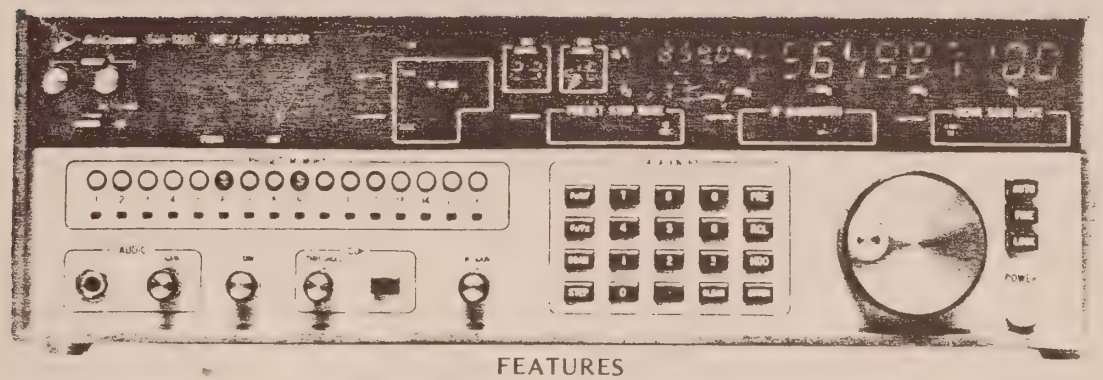
Editor

Send all equipment reviews, technical articles, technical tips and questions on such subjects as receivers, antennas, preamps, accessory equipment, repeaters, links, tones, scramblers, non-voice data transmissions or even computer applications for monitoring to:

SciComm

A "Dream" scanner reciver

SCR-7220
VHF-UHF RECEIVER



FEATURES

- MICROPROCESSOR BASED CONTROLLER
- OPERATOR PROGRAMMABLE MEMORY (16 CHANNEL)
- SCAN/STEP OPERATIONAL MODES
- AUTOMATIC HANDOFF
- EXTERNALLY ACCESSIBLE BUS STRUCTURE
- REMOTELY CONTROLLABLE THROUGH IEEE-488 INTERFACE
- FULL SYNTHESIZED TUNING
- LOW PHASE NOISE
- 100 Hz RESOLUTION
- HIGH DYNAMIC RANGE
- AM, FM, CW AND LOG DETECTION MODES (SSB AND PSK OPTIONAL)
- MODULAR CONSTRUCTION
- UP TO 4 SELECTABLE IF BANDWIDTHS

PRELIMINARY

SciComm's SCR-7220 VHF-UHF Receiver is a competitively priced digitally controlled receiver. Designed to be used as a stand-alone unit with local control or as an integrated part of a larger system using its remote control capability. The standard SCR-7220 provides for manual, semi or fully automatic signal acquisition and demodulation. This receiver utilizes a 6809 microprocessor and state of the art receiver technology to provide maximum control flexibility. The modular construction technique used provides a cost effective means for expansion to future requirements.

All receiver functions are operator controlled when in the local operating mode. When in the step and scan operating modes, the microprocessor controls all functions after being programmed via the front panel. When in the remote mode of operation, receiver functions can be controlled via the IEEE-488 bus.

The modular design concept has reduced to a minimum the logistic and maintenance considerations. All modules plug directly into the receiver mainframe. This arrangement facilitates the addition or modification of functional requirements to meet future demands at a minimum of hardware cost or down time. The SCR-7220 is a cost effective answer to meet your surveillance requirement in both a stand-alone installation or the most complex system where increased speed and overall capability count.

Standard options include:

- Panoramic digital refreshed display
- PSK detection mode
- Variable BFO
- Built in test (BITE)
- SSB with 1 Hz tuning resolution and other special demodulators
- Unique signal recognition modules for signal/data processing

SPECIFICATIONS:
SCR-7220

Frequency Range ..... 20-1100 MHz.
Frequency Resolution..... 100 Hz.
RF Input Impedance.....50 Ω , nom.
RF Input VSWR .....2.5:1, Max.
RF Input Noise Figure ..... 8dB, max. from 20 to 500 MHz; 9dB, max. from 500 to 1100 MHz.
Intermodulation Intercept Points in-band referenced to RF Input:
2nd Order .....+ 40 dBm, nom.
3rd Order .....-0dBm, nom.
RF Input Dynamic Range ..... From max. sensitivity to -5 dBm.
Frequency Accuracy Internal Reference .....$\pm 1 \times 10^{-8}$
External Reference ..... Frequency 5 MHz or 1 MHz, nominal level is 0 dBm in to 50 Ω .
Image Rejection ..... 80 dB, min.
Phase Noise..... -90 dBc/Hz at 20 KHz from Fc.
Predetection IF Output.....21.400 MHz center frequency; level is ≈ 20dB above RF input.
IF Gain Control Modes..... Manual, automatic
A G C Range..... Provides control over the entire RF input dynamic range of the receiver with output change less than 10 dB.
Internally Generated Spurs .....Below -115 dBm equivalent input.
Spurious Rejection ..... 60 dB, min.
LO Level at RF Input .....-85 dBm max.
Demodulation Modes .....AM, FM, Log. PSK, CW and SSB available as option.
IF Bandwidth ..... Choice of four of the following: 20 kHz, 50 kHz, 75 kHz, 100 kHz, 200 kHz, 500 kHz, 1 MHz, 2MHz, 4 MHz standard. Others available on request.
Video Output .....2 volts peak to peak into 50 Ω , nom.
Audio Frequency Response .....±1 dB, max. from 200 to 3600 Hz.
Audio Output Level (rear panel) .....2 volts peak to peak into 50 Ω rated power.
Headphone Audio Level ..... Continuously adjustable from zero to 10 mW into 600 Ω load
Speaker Output. Level ..... 200 mW into 8 Ω , max. adjustable via front panel.
Audio-Harmonic Distortion ..... Less than 1% at rated power
Carrier-Operated Relay (COR) ..... SPDT contacts brought out to terminal strip on back panel. 2 A@ 28 Vdc or 115VAC resistive.
Temperature ..... Receiver will operate from 0° to 50° C.
Size.....5.25 inches high, 19 inches wide 20 inches deep.
Weight..... Approximately 60 pounds
AC Power Input ..... 115/230 VAC, 48-62 Hz
Power Consumption .....100 watts, nominal
EMI..... Receiver will meet the requirements of Mil-STD-461.

SIGNAL MONITOR

Input:
Frequency.....21.4 MHz
Dispersion.....8 MHz Max.
Connector.....BNC
Impedance.....50 ohms
Level.....-80 to -10 dBm
Display Area .....1 1/8" x 2¾" min.
Sweep Linearity 5%
Sweep Rate .....5-30 Hz Adjustable
Resolution Bandwidth.....10 kHz
Image Rejection .....90 dB
IF Rejection .....85 dB
Marker Accuracy.....±5 kHz
Power .....115 VAC ± 10%
15 Watts
50-400 Hz
Size.....1¾" H x 7" W x 18" D

From John CAOR078 BC 101 out of band switch settings

414	1	1	1	1	0	1	0	1	0	0	1	0	0	1	0	
414.0125	1	1	1	1	0	1	0	1	0	0	0	1	1	1	0	
414.025	1	1	1	1	0	1	0	1	0	0	0	1	0	1	0	
414.0375	1	1	1	1	0	1	0	1	0	0	0	0	1	1	0	
414.05	1	1	1	1	0	1	0	1	0	0	0	0	0	1	0	
414.0625	1	1	1	1	0	1	0	0	1	1	1	1	1	1	0	
414.075	1	1	1	1	0	1	0	0	1	1	1	1	0	1	0	
414.0875	1	1	1	1	0	1	0	0	1	1	1	1	0	1	0	
414.1	1	1	1	1	0	1	0	0	1	1	1	1	0	0	1	0
414.1125	1	1	1	1	0	1	0	0	1	1	1	0	1	1	1	0
414.125	1	1	1	1	0	1	0	0	1	1	1	0	1	0	1	0
414.1375	1	1	1	1	0	1	0	0	1	1	1	0	0	1	1	0
414.15	1	1	1	1	0	1	0	0	1	1	1	0	0	0	1	0
414.1625	1	1	1	1	0	1	0	0	1	1	0	1	1	1	1	0
414.175	1	1	1	1	0	1	0	0	1	1	0	1	1	0	1	0
414.1875	1	1	1	1	0	1	0	0	1	1	0	1	0	1	1	0
414.2	1	1	1	1	0	1	0	0	1	1	0	1	0	0	1	0
414.2125	1	1	1	1	0	1	0	0	1	1	0	0	1	1	1	0
414.225	1	1	1	1	0	1	0	0	1	1	0	0	1	0	1	0
414.2375	1	1	1	1	0	1	0	0	1	1	0	0	0	1	1	0
414.25	1	1	1	1	0	1	0	0	1	1	0	0	0	0	1	0
414.2625	1	1	1	1	0	1	0	0	0	1	1	1	1	1	1	0
414.275	1	1	1	1	0	1	0	0	0	1	1	1	1	0	1	0
414.2875	1	1	1	1	0	1	0	0	0	1	1	1	0	1	1	0
414.3	1	1	1	1	0	1	0	0	0	1	1	0	0	1	1	0
414.3125	1	1	1	1	0	1	0	0	0	1	0	1	1	1	1	0
414.325	1	1	1	1	0	1	0	0	0	1	0	1	0	1	1	0
414.3375	1	1	1	1	0	1	0	0	0	1	0	0	1	1	1	0
414.35	1	1	1	1	0	1	0	0	0	1	0	0	0	1	1	0
414.3625	1	1	1	1	0	1	0	0	0	0	1	1	1	1	1	0
414.375	1	1	1	1	0	1	0	0	0	0	1	1	0	1	1	0
414.3875	1	1	1	1	0	1	0	0	0	0	1	0	1	1	1	0
414.4	1	1	1	1	0	1	0	0	0	0	1	0	0	1	1	0
414.4125	1	1	1	1	0	1	0	0	0	0	0	1	1	1	1	0
414.425	1	1	1	1	0	1	0	0	0	0	0	1	0	1	1	0
414.4375	1	1	1	1	0	1	0	0	0	0	0	0	1	1	1	0
414.45	1	1	1	1	0	1	0	0	0	0	0	0	0	1	1	0
414.4625	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	0
414.475	1	1	1	1	0	0	1	1	1	1	1	1	0	1	1	0
414.4875	1	1	1	1	0	0	1	1	1	1	1	0	1	1	1	0
414.5	1	1	1	1	0	0	1	1	1	1	1	0	0	1	1	0
414.5125	1	1	1	1	0	0	1	1	1	1	0	1	1	1	1	0
414.525	1	1	1	1	0	0	1	1	1	1	0	1	0	1	1	0
414.5375	1	1	1	1	0	0	1	1	1	1	0	0	1	1	1	0
414.55	1	1	1	1	0	0	1	1	1	1	0	0	0	1	1	0
414.5625	1	1	1	1	0	0	1	1	1	0	1	1	1	1	1	0
414.575	1	1	1	1	0	0	1	1	1	0	1	1	0	1	1	0
414.5875	1	1	1	1	0	0	1	1	1	0	1	0	1	1	1	0
414.6	1	1	1	1	0	0	1	1	1	0	1	0	0	1	1	0
414.6125	1	1	1	1	0	0	1	1	1	0	0	1	1	1	1	0
414.625	1	1	1	1	0	0	1	1	1	0	0	1	0	1	1	0
414.6375	1	1	1	1	0	0	1	1	1	0	0	0	1	1	1	0
414.65	1	1	1	1	0	0	1	1	1	0	0	0	0	1	1	0
414.6625	1	1	1	1	0	0	1	1	0	1	1	1	1	1	1	0
414.675	1	1	1	1	0	0	1	1	0	1	1	1	0	1	1	0
414.6875	1	1	1	1	0	0	1	1	0	1	1	0	1	1	1	0
414.7	1	1	1	1	0	0	1	1	0	1	1	0	0	1	1	0
414.7125	1	1	1	1	0	0	1	1	0	1	0	1	1	1	1	0
414.725	1	1	1	1	0	0	1	1	0	1	0	1	0	1	1	0
414.7375	1	1	1	1	0	0	1	1	0	1	0	0	1	1	1	0
414.75	1	1	1	1	0	0	1	1	0	1	0	0	0	1	1	0
414.7625	1	1	1	1	0	0	1	1	0	0	1	1	1	1	1	0
414.775	1	1	1	1	0	0	1	1	0	0	1	1	0	1	1	0
414.7875	1	1	1	1	0	0	1	1	0	0	1	0	1	1	1	0
414.8	1	1	1	1	0	0	1	1	0	0	1	0	0	1	1	0
414.8125	1	1	1	1	0	0	1	1	0	0	0	1	1	1	1	0
414.825	1	1	1	1	0	0	1	1	0	0	0	1	0	1	1	0
414.8375	1	1	1	1	0	0	1	1	0	0	0	0	1	1	1	0
414.85	1	1	1	1	0	0	1	1	0	0	0	0	0	1	1	0
414.8625	1	1	1	1	0	0	1	0	1	1	1	1	1	1	1	0
414.875	1	1	1	1	0	0	1	0	1	1	1	1	0	1	1	0
414.8875	1	1	1	1	0	0	1	0	1	1	1	0	1	1	1	0
414.9	1	1	1	1	0	0	1	0	1	1	1	0	0	1	1	0
414.9125	1	1	1	1	0	0	1	0	1	1	0	1	1	1	1	0
414.925	1	1	1	1	0	0	1	0	1	1	0	1	0	1	1	0
414.9375	1	1	1	1	0	0	1	0	1	1	0	0	1	1	1	0
414.95	1	1	1	1	0	0	1	0	1	1	0	0	0	1	1	0
414.9625	1	1	1	1	0	0	1	0	1	0	1	1	1	1	1	0
414.975	1	1	1	1	0	0	1	0	1	0	1	1	0	1	1	0
414.9875	1	1	1	1	0	0	1	0	1	0	1	0	1	1	1	0
415	1	1	1	1	0	0	1	0	1	0	1	0	0	1	1	0

415	1	1	1	1	0	0	1	0	1	0	1	0	0	1	0	
415.0125	1	1	1	1	0	0	1	0	1	0	0	1	1	1	0	
415.025	1	1	1	1	0	0	1	0	1	0	0	1	0	1	0	
415.0375	1	1	1	1	0	0	1	0	1	0	0	0	1	1	0	
415.05	1	1	1	1	0	0	1	0	1	0	0	0	0	1	0	
415.0625	1	1	1	1	0	0	1	0	0	1	1	1	1	1	0	
415.075	1	1	1	1	0	0	1	0	0	1	1	1	0	1	0	
415.0875	1	1	1	1	0	0	1	0	0	1	1	0	1	1	0	
415.1	1	1	1	1	0	0	1	0	0	1	1	0	0	1	0	
415.1125	1	1	1	1	0	0	1	0	0	1	0	1	1	1	0	
415.125	1	1	1	1	0	0	1	0	0	1	0	1	0	1	0	
415.1375	1	1	1	1	0	0	1	0	0	1	0	0	1	1	0	
415.15	1	1	1	1	0	0	1	0	0	1	0	0	0	1	0	
415.1625	1	1	1	1	0	0	1	0	0	0	1	1	1	1	0	
415.175	1	1	1	1	0	0	1	0	0	0	1	1	0	1	0	
415.1875	1	1	1	1	0	0	1	0	0	0	1	0	1	1	0	
415.2	1	1	1	1	0	0	1	0	0	0	1	0	0	1	0	
415.2125	1	1	1	1	0	0	1	0	0	0	0	1	1	1	0	
415.225	1	1	1	1	0	0	1	0	0	0	0	1	0	1	0	
415.2375	1	1	1	1	0	0	1	0	0	0	0	0	1	1	0	
415.25	1	1	1	1	0	0	1	0	0	0	0	0	0	1	0	
415.2625	1	1	1	1	0	0	0	1	1	1	1	1	1	1	0	
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415.2875	1	1	1	1	0	0	0	1	1	1	1	0	1	1	0	
415.3	1	1	1	1	0	0	0	1	1	1	1	0	0	1	0	
415.3125	1	1	1	1	0	0	0	1	1	1	0	1	1	1	0	
415.325	1	1	1	1	0	0	0	1	1	1	0	1	0	1	0	
415.3375	1	1	1	1	0	0	0	1	1	1	0	0	1	1	0	
415.35	1	1	1	1	0	0	0	1	1	1	0	0	0	1	0	
415.3625	1	1	1	1	0	0	0	1	1	0	1	1	1	1	0	
415.375	1	1	1	1	0	0	0	1	1	0	1	1	0	1	0	
415.3875	1	1	1	1	0	0	0	1	1	0	1	0	1	1	0	
415.4	1	1	1	1	0	0	0	1	1	0	1	0	0	1	0	
415.4125	1	1	1	1	0	0	0	1	1	0	0	1	1	1	0	
415.425	1	1	1	1	0	0	0	1	1	0	0	1	0	1	0	
415.4375	1	1	1	1	0	0	0	1	1	0	0	0	1	1	0	
415.45	1	1	1	1	0	0	0	1	1	0	0	0	0	1	0	
415.4625	1	1	1	1	0	0	0	1	0	1	1	1	1	1	0	
415.475	1	1	1	1	0	0	0	1	0	1	1	1	0	1	0	
415.4875	1	1	1	1	0	0	0	1	0	1	1	0	1	1	0	
415.5	1	1	1	1	0	0	0	1	0	1	1	0	0	1	0	
415.5125	1	1	1	1	0	0	0	1	0	1	0	1	1	1	0	
415.525	1	1	1	1	0	0	0	1	0	1	0	1	0	1	0	
415.5375	1	1	1	1	0	0	0	1	0	1	0	0	1	1	0	
415.55	1	1	1	1	0	0	0	1	0	1	0	0	0	1	0	
415.5625	1	1	1	1	0	0	0	1	0	0	1	1	1	1	0	
415.575	1	1	1	1	0	0	0	1	0	0	1	1	0	1	0	
415.5875	1	1	1	1	0	0	0	1	0	0	1	0	1	1	0	
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415.6125	1	1	1	1	0	0	0	1	0	0	0	1	1	1	0	
415.625	1	1	1	1	0	0	0	1	0	0	0	1	0	1	0	
415.6375	1	1	1	1	0	0	0	1	0	0	0	0	1	1	0	
415.65	1	1	1	1	0	0	0	1	0	0	0	0	0	1	0	
415.6625	1	1	1	1	0	0	0	0	1	1	1	1	1	1	0	
415.675	1	1	1	1	0	0	0	0	1	1	1	1	0	1	0	
415.6875	1	1	1	1	0	0	0	0	1	1	1	0	1	1	0	
415.7	1	1	1	1	0	0	0	0	1	1	1	0	0	1	0	
415.7125	1	1	1	1	0	0	0	0	1	1	0	1	1	1	0	
415.725	1	1	1	1	0	0	0	0	1	1	0	1	0	1	0	
415.7375	1	1	1	1	0	0	0	0	1	1	0	0	1	1	0	
415.75	1	1	1	1	0	0	0	0	1	1	0	0	0	1	0	
415.7625	1	1	1	1	0	0	0	0	1	0	1	1	1	1	0	
415.775	1	1	1	1	0	0	0	0	1	0	1	1	0	1	0	
415.7875	1	1	1	1	0	0	0	0	1	0	1	0	1	1	0	
415.8	1	1	1	1	0	0	0	0	1	0	1	0	0	1	0	
415.8125	1	1	1	1	0	0	0	0	1	0	0	1	1	1	0	
415.825	1	1	1	1	0	0	0	0	1	0	0	1	0	1	0	
415.8375	1	1	1	1	0	0	0	0	1	0	0	0	1	1	0	
415.85	1	1	1	1	0	0	0	0	1	0	0	0	0	1	0	
415.8625	1	1	1	1	0	0	0	0	0	1	1	1	1	1	0	
415.875	1	1	1	1	0	0	0	0	0	1	1	1	0	1	0	
415.8875	1	1	1	1	0	0	0	0	0	1	1	0	1	1	0	
415.9	1	1	1	1	0	0	0	0	0	1	1	0	0	1	0	
415.9125	1	1	1	1	0	0	0	0	0	1	0	1	1	1	0	
415.925	1	1	1	1	0	0	0	0	0	1	0	1	0	1	0	
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416	1	1	1	1	0	0	0	0	0	0	1	0	0	1	0	

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CALA303 DODGE, ROBERT;17800 E COLIMA RD #104
ROWLAND HEIGHTS, CA 91748
CALA304 BARTON, DAVID D;11722 E 207TH ST;LAKEWOOD, CA 90715
CALA305 ANDRUS, DAVID C;1348-B DIAMOND BAR BLVD
DIAMOND BAR, CA 91765
CALA306 JAMES;LOS ANGELES, CA 90004
CALA307 HAMMAN, JOSEPH L;9515 E WHITTIER BLVD
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WESTMINSTER, CA 92683
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WASHINGTON, DC 20008
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WASHINGTON, DC 20044
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FL 066 PUGSLEY, RICHARD;PO BOX 156;SEFFNER, FL 33584
GA 022 HARALSON, RUSSELL;315 SIMS ST;BARNESVILLE, GA 30204
IA 020 BLUM, STEVEN;508 1ST AVE;SPRINGVILLE, IA 52336
IL 133 BURZEWSKI, EDWARD;PO BOX 30013;CHICAGO, IL 60630
IL 134 BRANDYS, WALTER;13225 BALTIMORE AVE;CHICAGO, IL 60633
IN 036 FITCH JR, JOHN W;PO BOX 449;NOBLESVILLE, IN 46060
MD 025 FRITSCH, NORMAN E;7205 NIMITZ;SUITLAND, MD 20028
ME 013 PAGE, DAVID;8 SHURLEY ST #3;SKOWHEGAN, ME 04976
MI 051 BROWN, LARRY H;1717 LEITH ST;FLINT, MI 48506
MO 026 NIEDRINGHAUS, LAMDON;605 MOREWOOD ST;MANCHESTER, MO 63011
MO 027 ORR, CHARLES E;BELLWOOD MOBILE ESTS;LOT 118 RT 7
WARRENSBURG, MO 64093
NJ 068 SCHWEIKERT, WERNER;114 KEYPORT RD;N CAPE MAY, NJ 08204
NJ 069 PLAIN, GEOFFRY GEORGE;15 NORWOOD AVE #C2;SUMMIT, NJ 07901
NJ 070 MITCHELL, J;118 LAKE ST;JERSEY CITY, NJ 07306
NJ 071 WITTMER, WILLIAM;ACADEMY WOODS #A21;FLORENCE, NJ 08518
NY 115 RUSSO, GARY;6912 15TH AVE;BROOKLYN, NY 11228
NY 116 WOLKIEWICZ, JOHN;193 LOCKWOOD AVE;BUFFALO, NY 14220
OR 021 DALE, ROBERT H;2821 SE 160TH AVE;PORTLAND, OR 97236
PA 081 FINSEN, MRS ERIC;36 INDIGO RD;LEVITTOWN, PA 19057
PA 082 HARRIS, PHILIP;CHIEF ENGR WIP/WMMR;19TH & WALNUT
PHILADELPHIA, PA 19103
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PA 084 REYNOLDS JR, ROBERT;77 6TH ST;LARKSVILLE, PA 18651
PA 085 RIPKEE, MARTIN C;PO BOX 42;SCHUYLKILL HAVEN, PA 17972
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TN 014 VAN HORN, LARRY;7870 A CORSAIR;MILLINGTON, TN 38053
TX 053 BRANHAM, BRYAN P;1323 COLUMBIA;AMARILLO, TX 79107
TX 054 REIMER, JERRY;10149 HAMMERLY #60;HOUSTON, TX 77080
WI 020 CHERAMY, STEVE;1126 ACEWOOD;MADISON, WI 53716
WI 021 BICKHART, ART;2548S-6ST UPPER APT;MILWAUKEE, WI 53215
001AUST ARTHUR;AUSTRALIA

ADVERTISING GUIDELINES

1. Ads for products or services must relate to the hobby of monitoring two way radio communication such as receivers, crystals, antenna systems (antennas, coax, coax fittings coax switches, supporting structures, rotators, pre-amplifiers, etc.), carrier operated relays frequency counters and RF signal generators (both must be capable of operating at least to 512 MHz), converters, external synthesized oscillators, frequency references, books, appropriate tape recorders, appropriate computer hardware/software, CRT and hardcopy readouts for ASCII, etc.

2. Ads that will not be accepted include frequency lists that reveal "sensitive" or classified frequencies, unscramblers and any other products that are not in the best interest of the club or hobby.

3. Ads for Scanners/Hardware of value greater than $100.00 should not include prices. Readers must contact the advertiser for prices.

4. Auxilary hardware items (coax, antennas, crystals, power supplies, etc.), books, frequency lists and other printed matter can include prices.

5. The Board of Directors shall reserve the right to reject any advertising copy if it so chooses.

6. Whenever possible, products or services sould be described in an informative, educational manner.

7. The amount of advertising in the Newsletter shall never exceed 12.5%, not counting the cover in the page count.

8. Space for advertising shall be sold only by the ¼ page, ½ page and full page.

9. Advertising must fit "confortably" within the confines of a rectangular box. The box size for a ¼ page ad is 7 inches wide by 2-3/4 inches high. The box size for a ½ page ad is 7 inches wide by 5½ inches high. The box size for a full page ad is 7 inches wide by 11¼ inches high.

10. Advertisers must supply camera ready copy in dimensions listed above.

11. Location of advertising within the Newsletter: No ads shall apear on the cover, inside or out, or on any of the first 10 pages. The location of advertisements within these limits shall be at the discretion of the Newsletter editor.

12. Advertising rates: $36 for a full page ad, $20 for a ½ page ad and $12 for a ¼ page ad.

13. Payment for advertising: Checks or money orders must be made payable to "RCMA" and accompany the advertising copy.

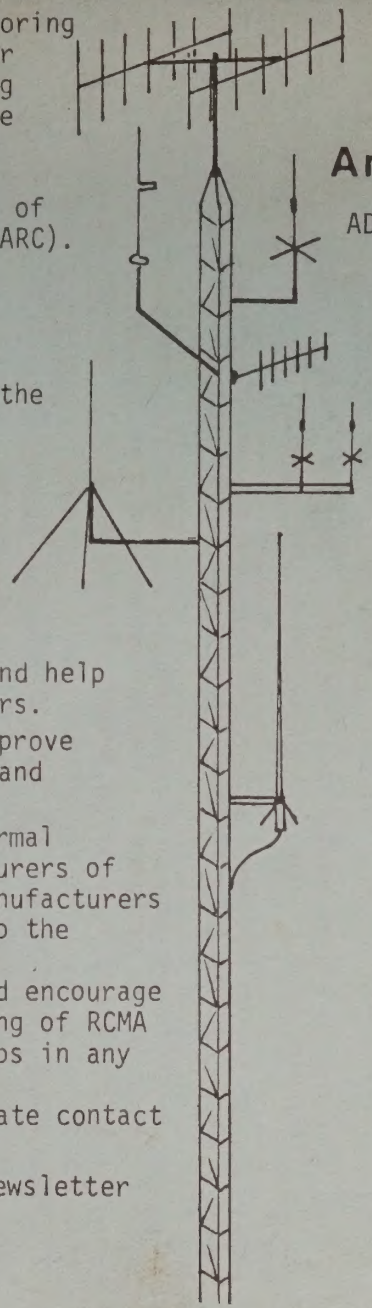
14 Advertisers must send their copy and payment to the RCMA Advertising Chairman

Michael Iacono
P. O. Box 145 RCMA
Medford, Ma 02155

The Radio Communications Monitoring Association is a radio club for persons interested in listening to two-way communications above 30 MHz as a hobby. RCMA was founded in May 1975 and is a Full Member of the Association of North American Radio Clubs (ANARC).

The goals of RCMA are:

1) To provide a fraternity for those who seriously pursue the hobby of monitor radio listening.
2) To try to be knowledgeable about two-way radio systems and operations.
3) To promote an understanding of the legal and ethical uses of monitor receivers.
4) To share information with and help other monitor radio listeners.
5) To try to understand and improve receivers, antenna systems and related equipment.
6) To offer suggestions and formal recommendations to manufacturers of monitor receivers and to manufacturers of other products related to the hobby.
7) To offer suggestions for and encourage the organizing and conducting of RCMA meetings and tours for groups in any geographic area.
8) To encourage and to facilitate contact between members.
9) To publish a regular club newsletter devoted to the hobby.



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